DISSERTATION ON

"A COMPARATIVE STUDY TO ASSESS THE EFFECTIVENESS OF LAPTOP ASSISTED TEACHING VERSUS CHILD TO CHILD APPROACH REGARDING PERSONAL HYGIENE AMONG SCHOOL AGE CHILDREN IN SELECTED CORPORATION SCHOOL AT CHOOLAI IN CHENNAI"

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CERTIFICATE

This is to certify that this dissertation titled **"A Comparative study to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in selected corporation school at Choolai in Chennai"** is a bonafide work done by Ms.S.Saranya, College of Nursing, Madras Medical College, Chennai – 600003 submitted to The Tamilnadu Dr.M.G.R. Medical University, Chennai in Partial fulfillment of the requirements for the award of Degree of Master of Science in Nursing, Branch II, Chlid Health Nursing, under our guidance and supervision during the academic period from 2012 – 2014.

Dr.R.Lakshmi, M.Sc (N)., Ph.D., MBA.,
Principal,
College of Nursing,
Madras Medical College,
Chennai-3.

Dr.R.Jeyaraman, MS, MCh.,
Dean,
Madras Medical College,
Rajiv Gandhi Govt. General Hospital,
Chennai-3.

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"Unselfish and noble actions are the most radiant pages in the biography of souls."

- David Thomas

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ABBREVIATIONS

SD	Standard Deviation
CI	Confidence Interval
fig	Figure
H1 H2	Research Hypothesis
Msc (N)	Master of Science in Nursing
NO	Number
X2	Chi square

ABSTRACT

Title: “A comparative study to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in selected Corporation School at Choolai in Chennai”

A quasi experimental study design was used to evaluate the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in selected corporation school at choolai in chennai. The sample size was 80,40 in laptop assisted teaching group,40 in of child to child approach group, selected by simple random sampling technique by lottery method from the sample frame within inclusion criteria. Data was collected by structured interview for demographic profile of the school age children. Pre test was done in both groups using structured questionnaire regarding personal hygiene. Conceptual framework used for the study was Weidenbach’sHelping Art of Clinical Nursing Model. In post test majority of the students that is 70.0%(28) of the students gained adequate knowledge regarding personal hygiene in laptop assisted teaching done by investigator. 90.0%(36) of the students have gained adequate knowledge regarding personal hygiene in child to child approach method. On comparison, there is highly significant difference between the two groups, t=2.42,p=0.01.It shows that child to child approach is more effective than laptop assisted teaching in improving the knowledge regarding personal hygiene among school age children. School-based hygiene education is vital in order to decrease the rates of transmissible diseases .Children are more receptive to learning and are very likely to adopt healthy behaviours at a younger age. Child to child approach is one of the best innovative method for the children to involve and learn.

CHAPTER-I
INTRODUCTION

The Wealth of a nation is not so much in its of economics and natural resources but it lies more decidedly in the kind and quality of the wealth of its children. It is they who will be the creators and shapers of a nation's tomorrow. Their quality and personality will determine the kind of destiny that beckons the nation.

Children are our most valuable resource

- Herber tHoover, 31st U.S. President

The future of the country depends upon the present children. If the children do not develop in a proper way, the country's future will be ruined. . The whole society has to think of its duty and responsibility towards the children. Society has to think what have been done for the children in the year past and what should be done for them in the year coming. . People should know that every individual in our society has a sacred duty towards the children. They should discuss about how to make the child healthy physically, mentally and morally. So, people should take a pledge not to neglect their children in their stress.

The healthy child will

have healthy mind

The healthy mind will

build the healthy nation

-S.R.Boomai,2005

The child should learn the importance of personal hygiene from school also Parents, caregivers and peers can influence the way in which children approach personal hygiene, which will stay with them for life. Educating children on good hygiene is the best way to avoid the spread of infection and disorders and not just for childhood complaints;

teaching the principles of correct hygiene at an early age can help keep individuals healthy in later life, and be taught to future generations. Principles of hygiene should be made part of everyday life and the best way for parents to teach their children about good hygiene is to lead by example.

The incidence of illness relating to areas of personal hygiene is more apparent in children as they are learning to take care of themselves and are exposed to many germs whilst in the school environment or in a play area.

Personal hygiene entails bathing regularly, keeping your hair clean, trimming fingernails and toenails, brushing your teeth and using deodorant. Personal hygiene can enhance your self-confidence and improve your chances of success in many areas of your life. A lack of it can have certain social and health ramifications. Psychological problems can often spur bad hygiene practices.

In addition to having proper resources and facilities, hygiene practices are heavily influenced by students' knowledge and attitudes towards hygiene. In a study conducted in Senegal, reasons given for not washing hands included stubbornness (not wanting to follow what adults say), laziness, the rush to go to breaks, the time it takes away from playing, and the dirt and smell of the toilets. Despite these negative attitudes towards hand washing, many children practice good hand washing behavior Based on the PPPHW study conducted , motivating factors behind proper hand washing included avoidance of disgust (i.e. avoid dirt and smell of defecation), nurture (i.e. teach children to wash hands so they stay healthy), status (i.e. clean people are more accepted), affiliation (i.e. cleanliness is associated with better socioeconomic status), attraction (i.e. cleaner people are more attractive), comfort (i.e. hands feel and smell fresh), and fear (i.e. avoid

the risk of disease) Furthermore, students did not want to miss school due to illness because they would not be able to spend time . Also, if the children had clean hands, they would have clean books, resulting in better .

"The child should learn the importance of personal hygiene from school also. As they are spending more hours in school it is the responsibility of teachers to train the school children to brush the teeth well, at least twice a day, wash hands before and after taking and toileting and to take bath daily"

-Jhone Nolan, Dads Uni 2000

"We do not educate people nor do We change people

People educate and change themselves

The most we can do as communication experts is to

Provide situation for change or educate themselves"

Communications,

- Tamilnadu integrated Nutrition Project

The Child to Child approach to health education was first introduced in 1978, following the Alma Ata Declaration on Primary Health Care and in preparation for the International Year of the Child. It was developed by a team of health and education professionals at the University of London, with advice from prominent international advisors, as a way for school-aged children to learn about and pass on basic health messages to their peers and younger siblings. The underlying premise of the approach is that children, if given the opportunity, can make important contributions to the health and well-being of themselves and others. Today, it is estimated that more than250

Child to Child projects have taken place in more than 70countries worldwide.

In Child to Child projects, "health" is defined in broad terms and refers to an individual's overall sense of physical, mental,emotional and social well-being. "Community health" and"community development" refer to efforts made to improve the physical, social, economic, political and environmental conditions in which people live.

1.1. NEED FOR THE STUDY

'Children are the hands by which we take hold of heaven."

- Henry Ward Beecher

Personal hygiene has taken back seat in today's modern and hectic world. It has been proved that many times health , education, career and relationship is hampered due to lack of personal hygiene. Personal hygiene habits should be started from early childhood .Good habit of personal hygiene can reduce the childhood mortality rate due to water born and vector born disease. Children's personal hygiene can be a difficult task to be thought , but they need to the basic .We want them to knew that they need to know the basic. We want them to know they could get sick if they don't practice ***(Carisa Silvesan 2009).***

It is important that children learn themselves how to keep clean and healthy .They should know the importance of personal hygiene and what makes them sick. Every day children play outdoors in dirt ,sand and water, so they are more to get infected if they do not maintain personal hygiene ***(Jhone Ambuli 1999)***.

A study conducted by the United Nations Children's Fund (UNICEF) and the Indian Ministry of Health found that study participants in rural India had poor status regarding knowledge, attitudes, and practices of hygiene Approximately 60% of children

surveyed did not know about the possible transmission of diseases through human waste. Simple hygienic measures such as washing hands with soap were poorly practiced, especially in rural areas .

Another study conducted by the Research-inspired Policy and Practice Learning in India (RiPPLE), a program surveying rural households in the southwest region of India, found that hand washing practices were also poor New hand washing facilities, in addition to awareness and knowledge about proper hygiene, have led to some changes in behavior and attitude, yet the prevalence of hand washing remains low in this region.

Past reviews about personal hygiene indicate that perception strongly influences one's hand washing beliefs and practices. Previous studies conducted in India provide limited details about the hygiene knowledge of populations rural areas. Additionally, few investigators have examined hygiene knowledge specifically among rural school children, a population especially susceptible to communicable diseases.

Overall, the majority of students reported washing hands before meals. The percentages of children who reported the importance of and the preference for hand washing before eating were 99.7% and 98.8%, respectively. These high proportions are consistent with the high proportion of children who reported actually washing their hands before meals (99.0%). Notably, the self-reported frequency of hand washing before meals among children in our study is substantially higher than frequencies reported from studies of children in other countries. For instance, studies from the Philippines and Colombia indicated that 75.9% and 46.9% of students, respectively, reported washing hands before meals. The considerably higher frequency of hand washing before meals among Indian children may be due, in part, to the Indian cultural tradition and ceremonial practice of washing hands before meals

or the desire for clean, fresh hands before eating However, only 36.2% of students who washed their hands reported using soap. This is similar to the Philippines and Turkey studies where an average of 37.7% and 42.4% of children, respectively, washed their hands with soap

Fecal-oral contamination is a major cause of transmissible diseases such as gastrointestinal infections. Washing hands after defecation is one of the most effective ways to prevent gastrointestinal parasitic infections . Although the students know that washing hands after defecation is important, they may be negatively influenced by factors such as laziness, the rush to play with friends, or even the lack of hand washing facilities close to the latrines In contrast, studies conducted in Colombia and India reported that 82.5% and 86.4% of students, respectively, wash their hands after using the toilet

The most common hygiene practices, in order of rank, were washing feet (97.4%), brushing teeth (89.2%), and changing clothes (84.9%). Bathing and hair washing received the lowest ranks. Approximately 34% of the students reported poor bathing practices and 21% reported poor hair washing practices. These findings are in concurrence with a study conducted in the Philippines which found that 35% of students reported poor bathing. Thus, personal hygiene becomes a low priority when water is scarce. Rather than use water for personal cleanliness, families prioritize their use of available water for drinking, cooking, washing clothes, and household cleaning

The low frequencies of hand washing with soap (36.2%) may be attributed to the lack of soap in school and at home. Soap, water, and latrines are essential for proper hygiene practice in schools, but previous studies have cited inadequate resources A study conducted among Colombian school children reported that only 7% of students reported having clean water and soap regularly available at school Those that had

water and soap were three times more likely to wash their hands before eating or after using the toilet). Even if knowledge of hygiene exists, lack of appropriate resources may negatively affect proper hand washing practices. Though data about the availability of resources in the student's households were not collected in our study, the resources available in rural communities are generally lacking A UNICEF study conducted in India found that less than one-third of schools had water points and only 5% had hand washing facilities, none of which had soap

Another reason that can influence hygiene practice among school children is the low level of parental literacy. In this study, the mother's literacy rate was lower than the father (39.7% and 67.5%, respectively). In India, the mother is typically the primary caretaker of the family and is thus charged with teaching her children proper health and hygiene practices An illiterate or uneducated mother may be less knowledgeable about teaching her children proper hygiene practices, subsequently leading to increased rates of infection and disease amongst her children In light of these observations, future school-based health and hygiene education programs should include strategies to involve family members, particularly mothers and siblings.

Previous studies have indicated that personal hygiene in India is very low however, to the best of our knowledge, no published reports have assessed knowledge attitude practice of hygiene among rural schools in India. School programes to be conducted to underscore the need for integrating hand washing and hygiene education programs in schools. Successful implementation of such programs is likely to contribute to reductions in morbidity and mortality associated with communicable diseases.

Importantly, Indian and foreign global public health agencies have been taking steps towards enhancing access to resources and to increase

health literacy particularly concerning sanitation and hygiene. In 2007, UNICEF launched the Water, Sanitation, and Hygiene (WASH) Program which is designed to promote hand washing and sanitation practices in low income countries including India Additionally, the Indian Ministry of Health recently implemented a National Millennium Hygiene and Sanitation Movement Program with the aim of cleaning up all homes, kebeles, and towns for the new millennium These initiatives, coupled with well developed school-based health and hygiene curricula that promote improved personal hygiene at home and at school should contribute to better health and hygiene conditions among school children.

Its is recognized that the Child- Child approach is one of the most important and lasting outcome of the International year of the Child(1979).The school have been found to be very conducive in imparting knowledge regarding health aspects.The project that is notable in this approach in India is the Malvani department of the K.E.M.Hospital in Bombay which runs the health centre at Malvani .This was launched in 1986.Apart this the cities like Delhi,Hyderabad etc,also have this project actively functioning .The Voluntary health Assosiation of India also launched this programme and they assist organization.

Initially, child to child activities were designed for children in the world's poorest countries and were focused on primary health care issues such as malaria and diarrhoea. However,by the early 1990s, recognition of the flexibility and appropriateness of the approach for children in other contexts led to the adaptation and implementation of Child to child projects in Manchester, UK. In 1999, the National Health Service (NHS) chose to build upon this global and national experience and to launch the first child to child projects in London.This work has taken place under the auspices of the Health Action Zone of Lambeth,

Southwark and Lewisham and to date projects have taken place in primary and secondary schools, after-school clubs and summer play schemes. This manual is based on the experience of the first two years of this programme.

School-based hygiene education is vital in order to decrease the rates of transmissible diseases Children are more receptive to learning and are very likely to adopt healthy behaviors at a younger age. They can also be agents of change by spreading what they have learned in school to their family and community members. Future studies regarding knowledge attitude practice should specifically assess the attitudes that students have towards hygiene, availability of water and sanitation facilities at home and at school, and the reasons behind hand washing. Enhanced, comprehensive knowledge about these issues should be used to improve low-cost but highly effective programs that will meaningfully attenuate the burden of transmissible disease among students in rural settings.

1.2. STATEMENT OF THE PROBLEM:

"A comparative study to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in selected Corporation School at Choolai in Chennai"

1.3. OBJECTIVES OF THE STUDY:

- To assess the existing level of knowledge regarding personal hygiene among school age children
- To assess the effectiveness of laptop assisted teaching regarding personal hygiene among school age children.
- To assess the effectiveness of child to child approach regarding personal hygiene among school age children.

- To compare the effectiveness of laptop assisted teaching and child to child approach regarding personal hygiene among school age children.
- To associate the posttest level of knowledge with the selected demographic variables of laptop assisted teaching regarding personal hygiene among school age children.
- To associate the posttest level of knowledge with the selected demographic variables of child to child approach regarding personal hygiene among school age children.

1.4. OPERATIONAL DEFINITION:

Effectiveness

It refers to the efficiency of the laptop assisted teaching and child to child approach in increasing the knowledge among school age children regarding personal hygiene which is measured in terms of significant gain in Post test knowledge score

Laptop assisted teaching

In this study it refers to systematically organized laptop teaching programme with power point slides designed to provide information regarding personal hygiene among school age children.

Knowledge

It is the correct verbal response by the school age children regarding personal hygiene which is measured by the knowledge questionnaire.

Personal hygiene

It refers to the maintenance of physical cleanliness by brushing teeth, bathing , wearing clean cloths etc.

Child to child approach

A method of teaching and learning where one child or a group of children are selected as change agent and made to teach or transform the information to the peers under proper guidance by socio drama or mono acting or by using any teaching aids like flash cards power point slides etc.

1.5 ASSUMPTIONS

- ❖ School age children are in need of proper information regarding the importance of personal hygiene.
- ❖ The child to child approach and laptop assisted teaching programme will be helpful to improve the knowledge and practice of school age children regarding personal hygiene.

1.6. HYPOTHESIS

H-1 : There is a significant improvement in knowledge regarding personal hygiene among school age children by using laptop assisted teaching and child to child approach

H-2 : There is a significant difference in improvement of knowledge regarding personal hygiene among school age children between laptop assisted teaching and child to child approach among school age children

H-3 : There will be significant association between the post test level of knowledge with their selected demographic variables of school age children by using child to child approach regarding personal hygiene

H-4 : There will be significant association between the post test level of knowledge with the selected demographic variables of school age children by using laptop assisted teaching regarding personal hygiene.

CHAPTER-II
REVIEW OF LITERATURE

Review of literature is an important step in the development of a research project. It involves the systematic identification, location, scrutiny and summary of written materials that contain information on research problems.

"The literature is reviewed to summarize knowledge for use in practice or to provide a basis for conducting study"

- Nancy Burns 2002

This chapter attempts to preset a broad review of the studies conducted, the methodology adopted and conclusions drawn by earlier investigation, it helps to study the problem in depth.

2.1 REVIEW OF RELATED STUDIES

The literature reviewed in the present had been presented under the following heading

- Literature related to personal hygiene .
- Literature related to child to child approach.
- Literature related to lap top assisted teaching.

LITERATURE RELATED TO PERSONAL HYGIENE

WH. Au, L.K.P et al., (2010), conducted a study on Hand washing programmes in kindergarten shows the effectiveness of structured programme on hand washing which has taken into account of the developmental stage of children. The programme contains five teaching sessions delivered on weekly basis: storytelling, health education, games, experiment and hands- on activities are planned. Outcome

evaluations include the knowledge level and behaviors on hand washing. After the education programme, knowledge level of students in both groups increased.

J Pediatr Health Care (2009) conducted a study on ill effects of Pediculosis, the condition of being infested by head lice, is a major community health problem in the United States. Pediatric nurse practitioners (PNPs) need to incorporate education relating the diagnosis and management of pediculosis in the well child visit.PNPs can dispel the common myths that have existed for so long to help open communication with parents and children to promote safe and proper treatment.Early detection is vital in preventing epidemics.

Rahul Malhotra (2008),A study on 136 food handlers assessed change in knowledge, attitudes and self reported hand washing practices after providing them 3 months health education using posters and interactive sessions using flip chart. Significant increase in knowledge about hand hygiene measures namely, washing hands before handling food were 23.5%, keeping nails cut and clean were found to be 8.1%. Findings highlight the importance of health education in personal hygiene .

J.Sch.Nurs Rapun Grabeel (2007). This paper describes an innovative approach to personal hygiene education in an elementary school. The three-phase project consisted of a hand-washing program, distribution of personal hygiene packets, pediculosis education, and intervention which culminated in the establishment of a school-based beauty salon.

BMC Public Health (2007) McDonald E, Bailie R, Grace J, Brewster D. Conducted a case study of physical and social barriers to hygiene and child growth in remote Australian Aboriginal communities Despite Australia's wealth, poor growth is common among Aboriginal

children living in remote communities. This study explores the physical and social barriers to achieving safe levels of hygiene for these children. A mixed qualitative and quantitative approach included a community level cross-sectional housing infrastructure survey, focus groups, case studies and key informant interviews in one community.

Rauyagin,O.& Pasandhanatorn.V (2004) conducted a study to identify the predisposing and enabling factors affecting mother's hygiene behavior in relation to childhood diarrheal disease.Mothers with children less than 2 yrs of age in both urban and rural areas of Suphanburi,a central province of Thailand were sampled .Findings suggested that health education programs should utilize local terminology and work to encounter common misunderstanding regarding childhood diarrheal disease and its prevention.

Eveline Blot.G, et al., (2002) conducted a study to assess the important role of hygienic behavior in the prevention of disease related to water and sanitation among school children.A structured observation was used to assess the practice of hygienic behavior.Out of 1250 children 900 were observed.The result showed that better hygiene through hand washing, food protection, and domestic hygiene brought reduction of 33% in diarrhea incidence ,where as improved water supply shows average reduction of 20%.

Nayar S, Singh D, Rao NP, Choudhury DR. Indian J Pediatr. (2000) Mahatma Gandhi Institute of Medical Sciences,Maharashtra. School children (1608) were examined for three items (nails, scalp hairs and teeth) relating to personal hygiene and relevant infective conditions from two sets was collected . From the results, it was evident that children of Group I villages were better with respect to all the items related to personal hygiene and infective conditions excepting scalp infections, where difference was not statistically significant, indicating

teachers' superiority over the CHVs' in imparting health education to school children.

Rev Belge Med Dent (1999) Conducted a study regarding caries experience, no differences with the normal population are found. The dental health situation on the other hand, depends upon the care devoted to oral hygiene and when necessary, upon the auxiliary help of parents and educators. Patient management will therefore be qualitatively different from person to person and shall be based on a unique management of the behavioral characteristics. Where the classical 'tell, show, do"-method fails, the 'tell, show, FEEL, do"-method will lead to a successful approach.

LITERATURE RELATED TO CHILD TO CHILD APPROACH

Wennhall et al., (2007) conducted a study among school children from upper primary class (4-5) took part in one year programme of school readiness activities with the children about to enter class I, the pattern of school readiness for group of children exposed to child to child learning material were compared against control communities whose first grade children who had not been exposed to this child to child approach showed decreased interest in school readiness activities and enrolment.

Walvekar P.R, Naik V.K. et al., (2005) conducted a study that focused on the 74% of rural population of our country developed undesirable attitude and practice regarding health due to illiteracy , poverty, ignorance and misconceptions.About 30-35% 0f rural school children suffer from much morbidity like anemia, repiratory tract infection,diarrhoea and worm infestation.The vast population in the rural area could be approached through child to child programme.Using randomised control trial child to child session was conducted among 54

school students which revealed that there was a significant improvement in the knowledge and change in attitude.

Mishra.G (2004) conducted a study in which child to child approach programme was used during pulse polio immunization campaigns. This concepts was used in the slums of Mumbai for motivating people to participate in campaigns. .Each child was asked to teach the other child of the group .Each child was allotted 30 families to educate about Pulse polio immunaization and achieved 100% response from the public.

Barlett Kathy (2003), conducted a study on child to child approach which has two main goals.To help children become knowledgeable and competent concerning to health and hygiene ,through activity based learning that can be applied to their everyday lives. Child to child approach is now used in programs in over 90 different countries.These range from structured teaching programme in school to the participation of children in community health programme in unban slums.The programme identifies children as" mini doctor" begin with elder child –to peer child to family and community linkage.

Divya (2003) In rural India,various programs focus on non formal education delivered to children before school and in day care units,and provide training to older children who bring their younger sibling to the centres .The important component of the programme is offering oppurtunites for girls to develop self confidence and to become most visible to the community .They can also help disseminate important information about health to school-youth.

Aga Khan foundation (2002) a study conducted in Malvani ,a health clinic uses local children as outreach workers in community health programes. These "mini doctors" take young children to the clinic for examinations and check them for scabies .They apply simple

treatment under the supervision of a health worker and explain to their ,charges about the importance of cleanliness .Other activities include plays,skits,story telling, action songs, puppetry and selling nutritious snacks to replace fried or sweet and junk foods.

Kavitha Siradhna (2002) conducted a study among children aged 10 -12 years to spread the health message about tuberculosis using child to child approach from a formal system of education.65 students of standard five were selected and educated about tuberculosis for a period of 4 weeks, a open day was arranged were 65 students from nearby school were selected child to child approach was conducted to them ,post test was given to those children ,the result showed 80% improvement in knowledge.

Hosny G, Moloukhia TM etal 2001 had conducting a study in which 35 street children aged between 7 and 15 years were selected and an environmental behavioural modification programme by children was implemented in Alexandria city .The mean scores for each behaviour item together before and after the intervention were significantly improved .

Landsdown (2000) conducted a study to identified the depth of ethnograpically based accounts.More often than not child to child success stories are presented without due consideration for contextual issues .However,much depends on context within which the children are expected to communicate about health and children may success in same situations but not in other.

Sagarmath child club project (2000) conducted a study in the club which has a total of 60 members , of which 35 are boys and 25 are girls .The older students support and guide the younger students through child to child approach and individual monitoring. They focused on child labour and child rights.

WHO (1999) The rationale behind the child to child approach is that in many societies around the world it is often not only parents looks after their children,but an elder sister or brother also looks after their siblings.Childern in schools area an untapped sourcesof health care.It was felt that child minders would perform their if they understand what they should do related to the healt concept if thought in aright manner .

Health Educ Q. Fryer ML. (1999) Health education through interactive radio: a child-to-child project in Bolivia.Education Development Center's Radio Education Project, La Paz, Bolivia. In developing countries it is common for older children to assume much of the responsibility for care of their younger siblings. The field evaluation revealed the need for modifications in the teachers' role and greater attention to teacher training. Students responded enthusiastically and achieved significant knowledge gains as a result of the program. Plans are underway to expand the radio health program.

Shirley.A (1997) A study was conducted among VI standard students of Ambattur and Avadi with 20 change agents and 162 peer group members. Pre test was conducted on knowledge of vitaminB2 ,to the change agents and the peer group. The scores of pre test and post test was compares to assess child to child approach and found significantly higher in post test.

LITRATURE RELATED TO LAP TOP ASSISSTED TEACHING

Lindberg I,Christensson K,Ohriling K.,et al (2009) conducted the study to describe the parents experience of using video conferencing when discharge early from combination of quantitative and qualitative methods was used to describe the experience .The findings of thestudy indicates that video conferencing helpful for the patient discharge from the hospital.

John Hoffman (2007) He did study on effect of parent education on First-time Fathers skill in interaction with their infants,University of Clagary researcher Kren Benzies (Nursing) tested the effectiveness of video coaching as a way to teach parents /children interaction skill to new fathers.One hundred and sixty two fathers were randomly assigned to two groups.The interaction group received two home video coaching session when their babies were five and six months old .The intervention lead to a significant improvement in father's interaction skill.

Navarre et all (2007), Studied about the effectiveness of laptop assisted teaching in the field of health have improved the knowledge among the students.

Barrerra M.E,Rosenbaum P.L et al (2006) has assessed the effectiveness of parents education intervention programme regarding preterm care .One hundred parents were randomly selected for the control and experimental group .The result showed that majority of the parents(89%) of intervention group significantly improved their knowledge.

Gangliono's (1998) states critical assessment on the use of video or laptop media for teaching either students or patients increase short term and long term knowledge and promote the compliance with health regimen.

Steringberg et al (1996) reported that laptop education lie on acceptable and effective strategy when used in conjuction with other method varying the medium for education

2.2CONCEPTUAL FRAMEWORK

A conceptual framework or model is made up of concepts that are mental image of a phenomenon. These concepts are linked together to express their relationship between them.

A model is used to denote the symbolic representation of concepts

- Jacqueline Fawcett, 1987

The study is based on the concept to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children.

The investigator adopted the ***Widenbach's Theory of helping art of clinical Nursing, 1964*** for a conceptual framework.

Widenbach's prescriptive theory is directed toward an explicit goal. It consists of three factors central purpose, prescription and realities. A Nurse develops a prescription based on a central purpose and implements it according to the realities of the situation.

Ernestine Wiedenbach view nursing practice as an art based on goal directed care, her vision of nursing practice closely parallels the assessment, implementation and evaluation steps of the nursing process. She identifies seven levels of awareness (sensation, perception, assumption, realization, insight, design and decision).

The conceptualization of nursing practice according to this theory consists of three steps as follows.

Step I : Identifying the need for help

Step II : Administering the needed help

Step III : Validating that the need for help was met

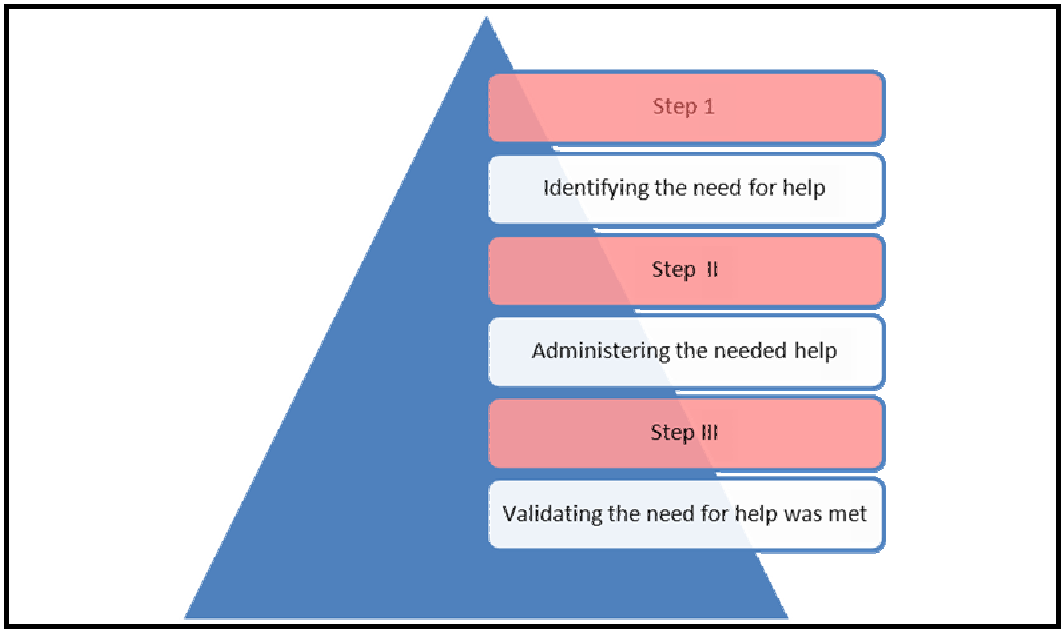


Fig.1 Conceptualization of nursing practice in relation to Widenbach's Theory of helping art of clinical Nursing

Conceptualization of nursing practice

This theory views nursing as an art based on the goal or central purpose. It consist of 3 factors, Central purpose, Prescription and realities

Central Purpose

It refers to what the nurses want to accomplish. According to this study the central purpose is to assess the effectiveness of Art therapy in reduction of the level of anxiety among hospitalized children

Step-I: Identifying the Need for Help

This step involves determining the need for help. Here the researcher explores the children's knowledge on personal hygiene .It includes following components.

- ***General information:*** This comprises the demographic variable

- ***Central purposes:*** Central purpose is to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children.

- ***Perception:*** It includes the intervention prescribed to meet the central purpose that is planned teaching programme

Step-II: Ministering of the Needed Help

Here the researcher formulates a plan and with the children's acceptance implements the plan. This includes one component called reality which is the child to child approach in improving the knowledge level. This reality has four components'

Realities

Agent : The researcher act as an agent to render the needed help

Recipient : The child who fulfills the inclusion and exclusion criteria will be accepted as the recipient needing the help

Goal : The goal is to improve the knowledge

Means : Means are the activities and device used by researcher to achieve the goal. Here the investigator applied child to child and laptop assisted teaching regarding personal hygiene

Framework : It refers to the facilities in which planned teaching programme is provided. Here the framework was government Hindu union middle school

Step-III: Validation of the Need for Help was Met

It validates the needed help, what is delivered in achieving the central purpose. This involves the post assessment done after ministering the help and comparison and analysis to infer the outcome. Statistically proved that child to child approach is more effective than the laptop assisted teaching in improving the knowledge about personal hygiene

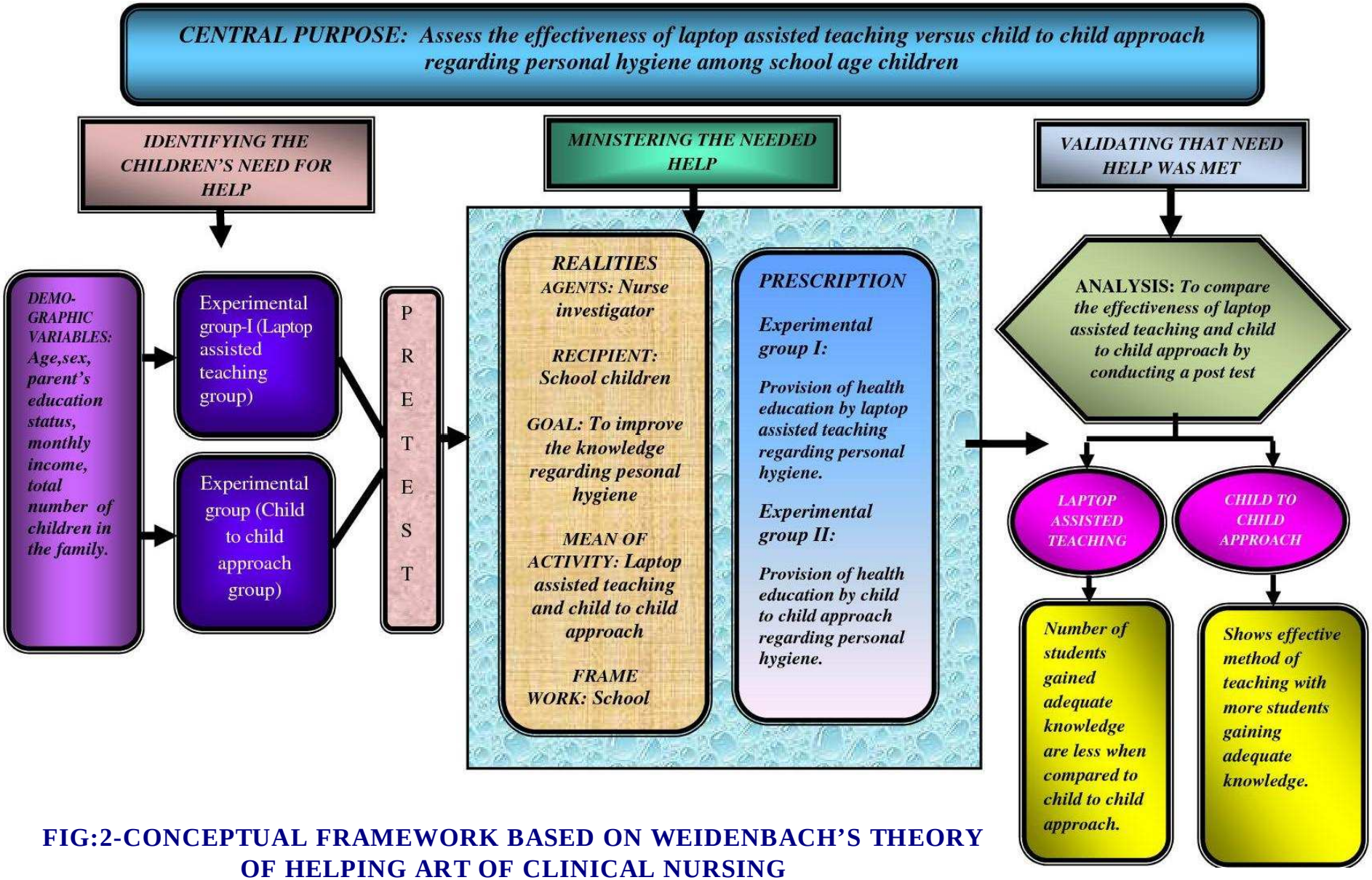


FIG:2-CONCEPTUAL FRAMEWORK BASED ON WEIDENBACH'S THEORY OF HELPING ART OF CLINICAL NURSING

CHAPTER –III
METHODOLOGY

"The methodology of research indicates the general pattern of organizing the procedure of gathering valid and reliable data for an investigation"

- (Kothari C.R.., 2004).

This chapter provides a brief description of the methods adopted by the investigator in the study. It includes the research approach, research design, the setting, sample and sampling technique .It further deals with the development of the tool and procedure for data collection and plan for data analysis.

3.1. RESEARCH APPROACH

The research approach adopted for this study is an evaluative approach. This study aims at assessing the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children.

3.2. RESEARCH DESIGN

Quasi experimental type of two group pre test and post test only design is adopted for the present study.

Group I - O X O

Group II - O X O

O : Pre test assessment

O : Post test assessment

X : Child to child approach

X : Laptop assisted teaching

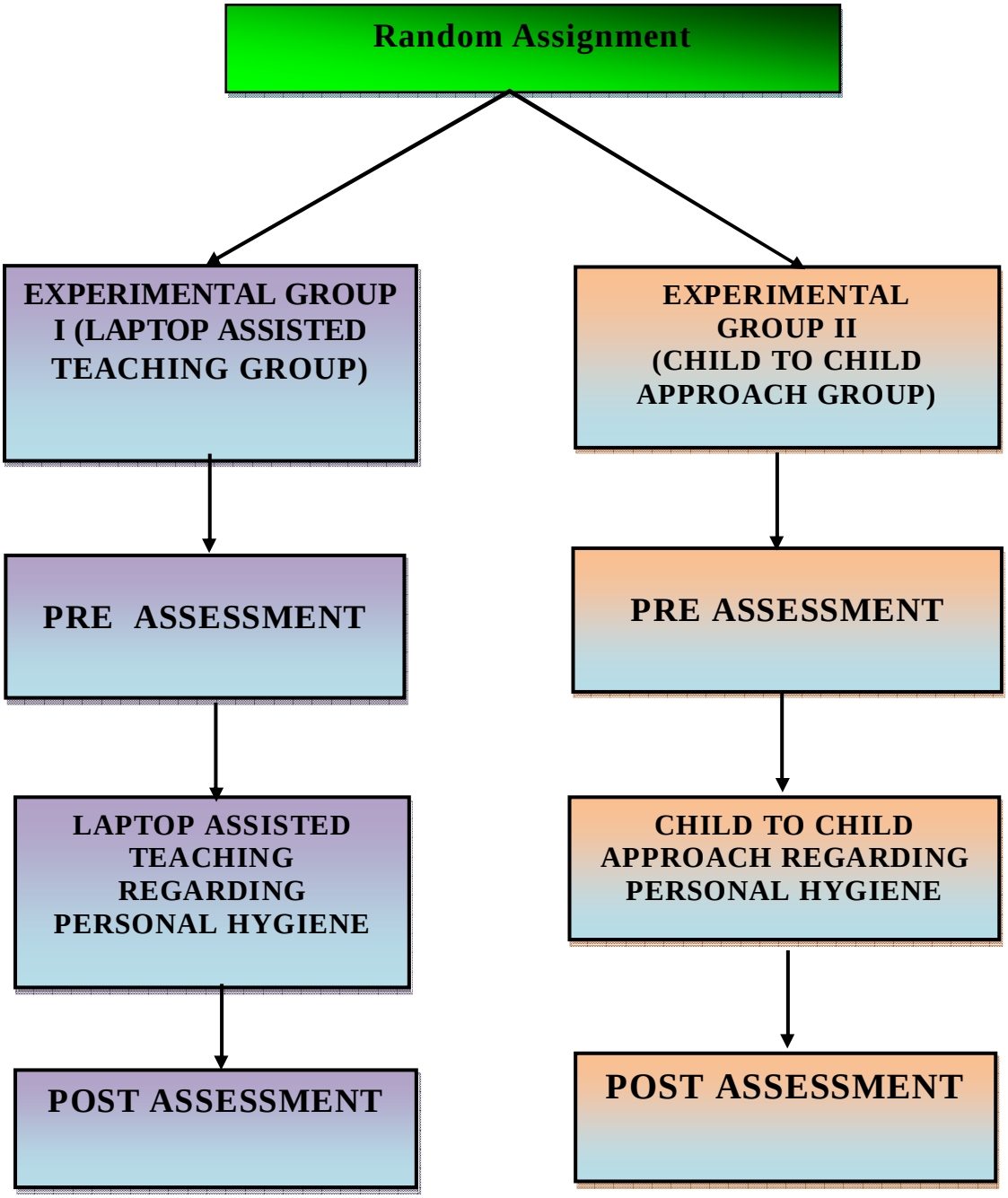


Fig-3: Research Design- Two group - Pretest Post test only Design

3.3. VARIABLES

Independent variable

- Laptop assisted teaching for 40 children regarding personal hygiene.
- Child to child approach for 40 children regarding personal hygiene.

Dependent variables

Knowledge regarding personal hygiene among school age children.

3.4. SETTING OF THE STUDY

The study was conducted in Hindu union middle school at Choolai in Chennai.

3.5. STUDY POPULATION

The populations included in the study are children under school age group in Hindu Union Middle School at Choolai in Chennai.

3.6. SAMPLE

All the children under the age group 11 to 13 years studying in Hindu Union Middle School are selected as samples.

3.7. SAMPLE SIZE

80 school age children studying in Hindu Union Middle School

40 children in Experimental Group I (Laptop assisted teaching)

40 children in Experimental Group II (Child to child approach)

3.8. SAMPLING TECHNIQUE

Probability Sampling- simple random sampling-lottery method was used.In lottery method all the samples in the sampling frame are numbered and the numbers are written in equal square slips and rolled, each bearing only one number. Children were randomly assigned to Experimental group I (laptop assisted teaching group) and Experimental group II (child to child approach group).

3.9. CRITERIA FOR SELECTION OF SAMPLES

Inclusion Criteria

- Children within the age group 10 to 13 years
- Children who are willing to participate or whose parents gives concern for participation
- Children who are mentally healthy
- Both boys and girls

Exclusion Criteria

- Children with learning disability
- Children who are not willing to participate
- Children who are blind and physically challenged
- Children other than age group 10 to 13 years

3.10. DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool consists of two parts:

Section-A: Demographic Data

It deals with the demographic variables such as age,sex ,education status of the children,education status of the father and mother.total number of children in the family,monthly income of the family.

Section –B: Structured Questionnaire

It consist of 30 structured questionnaire ,each question has four choices, which includes question about skin care, oral care, hair care, hand and foot care, eye ,ear and nose care.

3.11 SCORING PROCEDURE

With respect to the knowledge scale the scoring of section B is as follows, for each correct answer 1 mark is awarded ,for wrong answers no mark is awarded, then the marks are converted to percentage and score was classified as

<50% : Inadequate knowledge

50-75% : Moderately adequate knowledge

>75% : Adequate knowledge

3.12. ETHICAL CONSIDERATION

This study was conducted after the approval from the ethics committee Madras medical college, Chennai-3. All respondents were carefully informed about the purpose of the study and their part during the study and how the privacy was guarded. Ensured confidentiality of the study result. Thus the investigator followed the ethical guidelines which were issued by the research committee. Written permission was obtained from all participants.

3.13. CONTANT VALIDITY

The content of the tool was validated by the experts in the field of medicine and Nursing. The suggestions of the experts were incorporated in the study. Minimal modification was made in the section A, Section B of the tool. After the change the tool was finalized. The refined modified tool was used for data collection and content validity was obtained.

3.14. PILOT STUDY

With formal permission from the Head of the Department of School health Cell ,ICH and from the Director of Elementary education , Choolai the pilot study was conducted in the Hindu union middle school Choolai Chennai for the period of five days. Six samples those who fulfilled the inclusion criteria were chosen by using simple random sampling technique. Pre test was conducted to all six children, three children were taught using laptop slides regarding personal hygiene ,post test was conducted .These 3 children were selected as change agents and made to teach to other 3 children regarding personal hygiene.Post test was conducted .The study shows feasibility to conduct the proposed study as planned.The instrument was found reliable for proceeding with the main study. The other opinion and suggestion were incorporated in the main study to accomplish the objectives of the study.

3.15. RELIABILITY OF THE TOOL

The reliability of the tool was assessed by using inter rater reliability correlation value is 0.85. This correlation coefficient is very high and it is a good tool for assessing the effectiveness of child to child approach verses laptop assisted teaching regarding personal hygiene among school age children

3.16. DATA COLLECTION PROCEDURE

The study was conducted with the permission of the City health officer,Head of the Department of School health Cell -ICH , Assistant Elementry education officer, Choolai, and the ethical committee.

After getting informed consent from the school in charges and parents/ guardian general demographic information was collected from the 80 selected children.

Samples were selected by simple random sampling technique – lottery method was used to select participants from the sample frame and assigned to two groups- Experimental group I and Experimental group II.

Pre test was conducted by the investigator assess the existing level of knowledge of 80 children of both the experimental groups regarding personal hygiene by giving a structured questionnaire as a pretest.

INTERVENTION

Experimental group I- 40 children were taught regarding personnel hygine using laptop assisted slides by the investigator. Post test was conducted for experimental group I after one week.

Experimental group II- 8 children were selected as change agents from experimental group I by following the selection criteria .

CRITERIA FOR SELECTION OF CHANGE AGENT

It deals with the criteria for selection of change agent, that is being done by the examiner with the help of the class teacher of the particular class

S.No	Criteria	Score
1.	Good leadership quality	2
2.	Extracurricular activity participation	2
3.	Good Communication skill	2
4.	Good academic skill	2
5.	More than 25 score in post test after laptop assisted teaching.	2

Score:8 students getting score 7 and above out of ten are selected as change agent.

Each child was assigned five children from experimental group II and made to teach about personal hygiene. Post test was conducted using same questionnaire for experimental group II after one week.

3.17. PLAN FOR DATA ANALYSIS

The data were planned to be analyzed in terms of the objectives of the study using descriptive and inferential statistics.

Descriptive statistics include

1) Frequency and percentage distribution of demographic variables.

2) Mean and standard deviations of pre assessment and post assessment knowledge scores.

Inferential statistics include

1) Student independent 't' test for comparison of pre assessment and post assessment

2) Chi square test is used to assess the effectiveness of art therapy

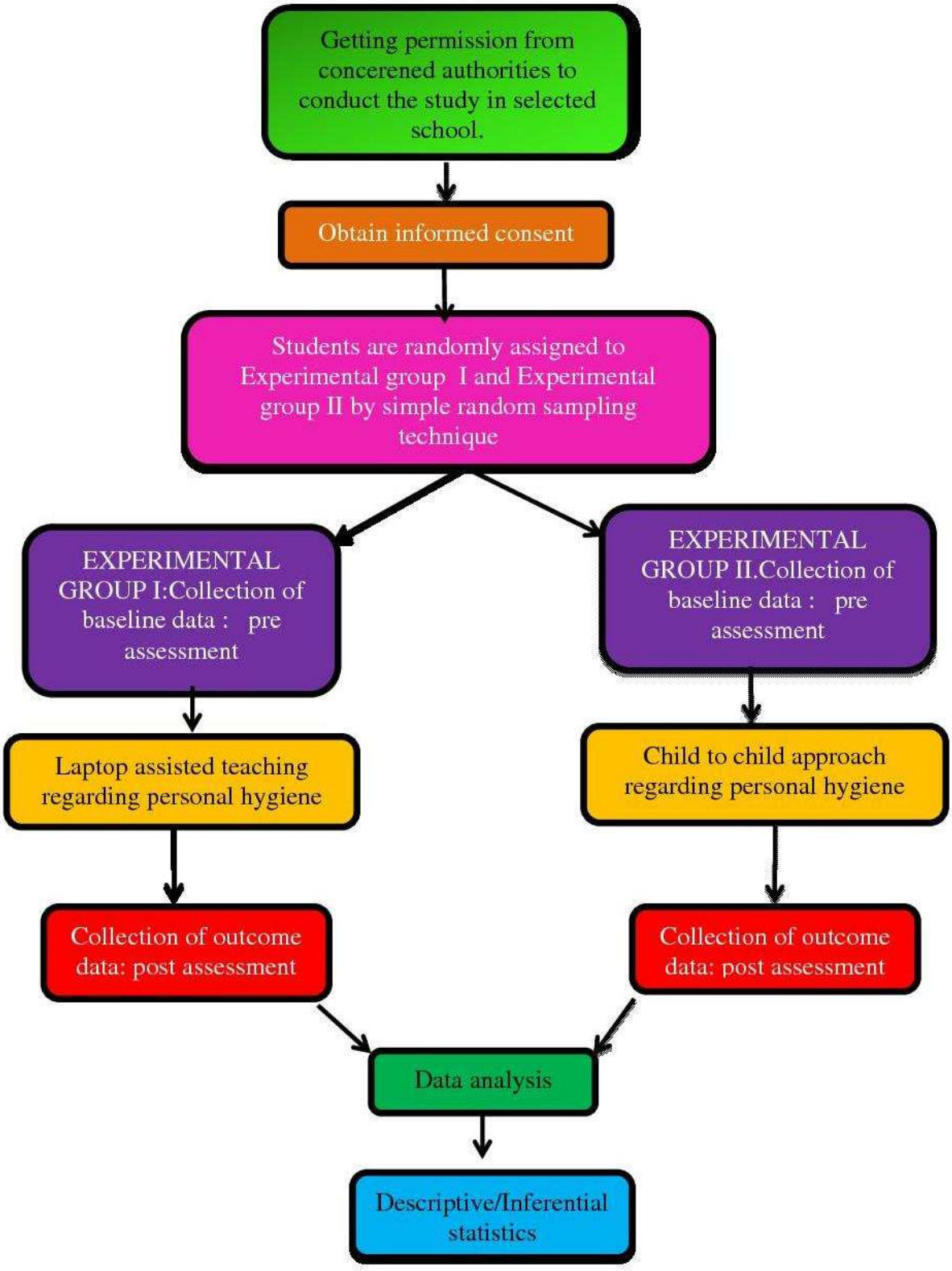
3) The data analysis and interpretations of the results are given in the following chapter.

3.18. PROJECTED OUTCOME

The study findings will be helpful for health professional to elicit,

- ❖ The level of knowledge will increase by educating the children by laptop assisted teaching regarding personal hygiene.
- ❖ The level of knowledge will increase by educating the children by child to child approach regarding personal hygiene.
- ❖ The practice of different teaching method makes the children to gain adequate knowledge to the least possible extent.

FIG : 4 SCHEMATIC REPRESENTATION OF THE METHODOLOGY



CHAPTER-IV
DATA ANALYSIS AND INTERPRETATION

"All things are subject to interpretation. Whichever interpretation prevails at a given time is a function of power and not truth."

- Friedrich Nietzsche

This chapter deals with the analysis of data collected from selected 80 school age children studying in Hindu Union Middle School at Choolai in Chennai. The data findings have been tabulated and interpreted according to the plan for data analysis.

Statistical analysis is a method for rendering quantitative information meaningful and intelligible .This enables the researcher to summarize, organize, evaluate, interpret and communicate numeric information.

Descriptive and inferential statistical were used for the data ,as per the objectives of the interpretation has been tabulated and organized as follows.

ORGANIZATION OF THE DATA

Section - I : Description of demographic profile of selected children

Section – II : Assessment of the existing level of knowledge regarding personal hygiene among experimental group I (Laptop assisted teaching)and Group II(child to child approach)

Section –III : Assessment of the effectiveness of laptop assisted teaching regarding personal hygiene among experimental group I.

Section –IV : Assessment of effectiveness of child to child approach regarding personal hygiene among experimental group II.

Section-V : comparision of effectiveness of Laptop assisted teaching and child to child approach regarding personal hygiene among school age children.

Section-VI : Association of level of knowledge with the selected demographic variables of group-I (laptop assisted teaching) among school age children.

Section-VII : Association of level of knowledge with the selected demographic variables of group-II (child to child approach) among school age children.

SECTION-I SOCIO DEMOGRAPHIC DATA

Table:1.Description of demographic profile of selected children

n=40

Demographic Variables		Group			
		Laptop assisted teaching group		Child to child approach group	
		n	%	n	%
Age	10 -11 yrs	16	40.0%	11	27.5%
	11 -12 yrs	21	52.5%	26	65.0%
	12-13 yrs	3	7.5%	3	7.5%
Sex	Male	21	52.5%	20	50.0%
	Female	19	47.5%	20	50.0%
Class	6th std	17	42.5%	13	32.5%
	7th std	23	57.5%	27	67.5%
Father's education status	Illiterate	11	27.5%	9	22.5%
	Primary	17	42.5%	15	37.5%
	Secondary	10	25.0%	13	32.5%
	Graduate	2	5.0%	3	7.5%
Mother's education status	Illiterate	13	32.5%	11	27.5%
	Primary	22	55.0%	21	52.5%
	Secondary	3	7.5%	6	15.0%
	Graduate	2	5.0%	2	5.0%
Total no. of children in the family	One	8	20.0%	5	12.5%
	Two	14	35.0%	14	35.0%
	Three	11	27.5%	17	42.5%
	Four	7	17.5%	4	10.0%
Family's monthly income	> Rs.5000	6	15.0%	4	10.0%
	Rs.2500-4999	14	35.0%	14	35.0%
	Rs.1000-2499	13	32.5%	17	42.5%
	< Rs.1000	7	17.5%	5	12.5%

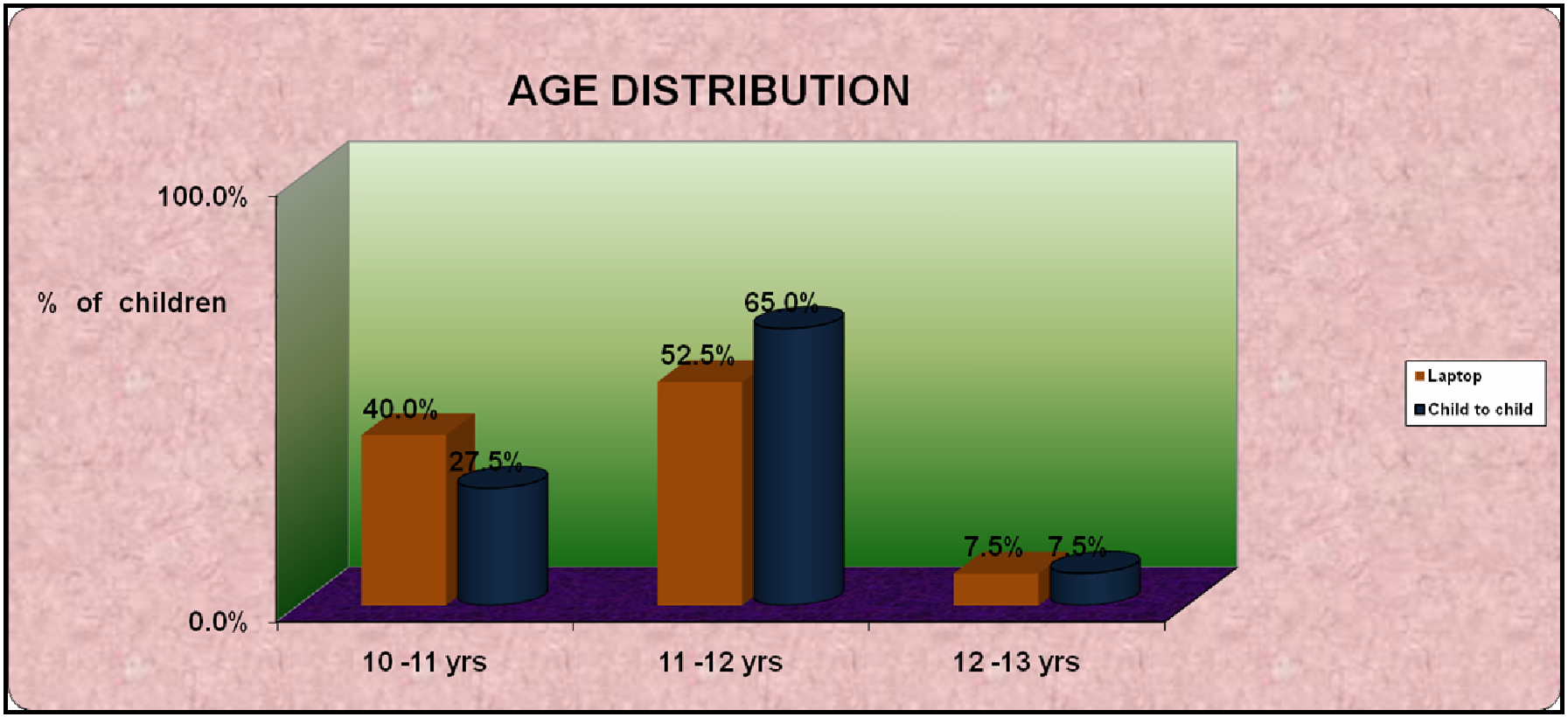
Table 2 shows the demographic data of the selected school age children participated in the study.

The above table depicts the distribution of socio demographic variables of school age children in Group I (laptop assisted) and Group II (child to child approach)

In group I with respect to the age majority of the children belongs to 11to 12 years of age and consist of 52.5%,in case of sex there were more male children with 52.5%.57.7% of the students are studying in seventh standard.Regarding education status of the parents both father(42.5%) and mother(55%) achieved primary education.35% of the families have two children in their family. The monthly income of the children's family implies that majority of the children's family are with monthly income of Rs.2500-4999 with 35%.

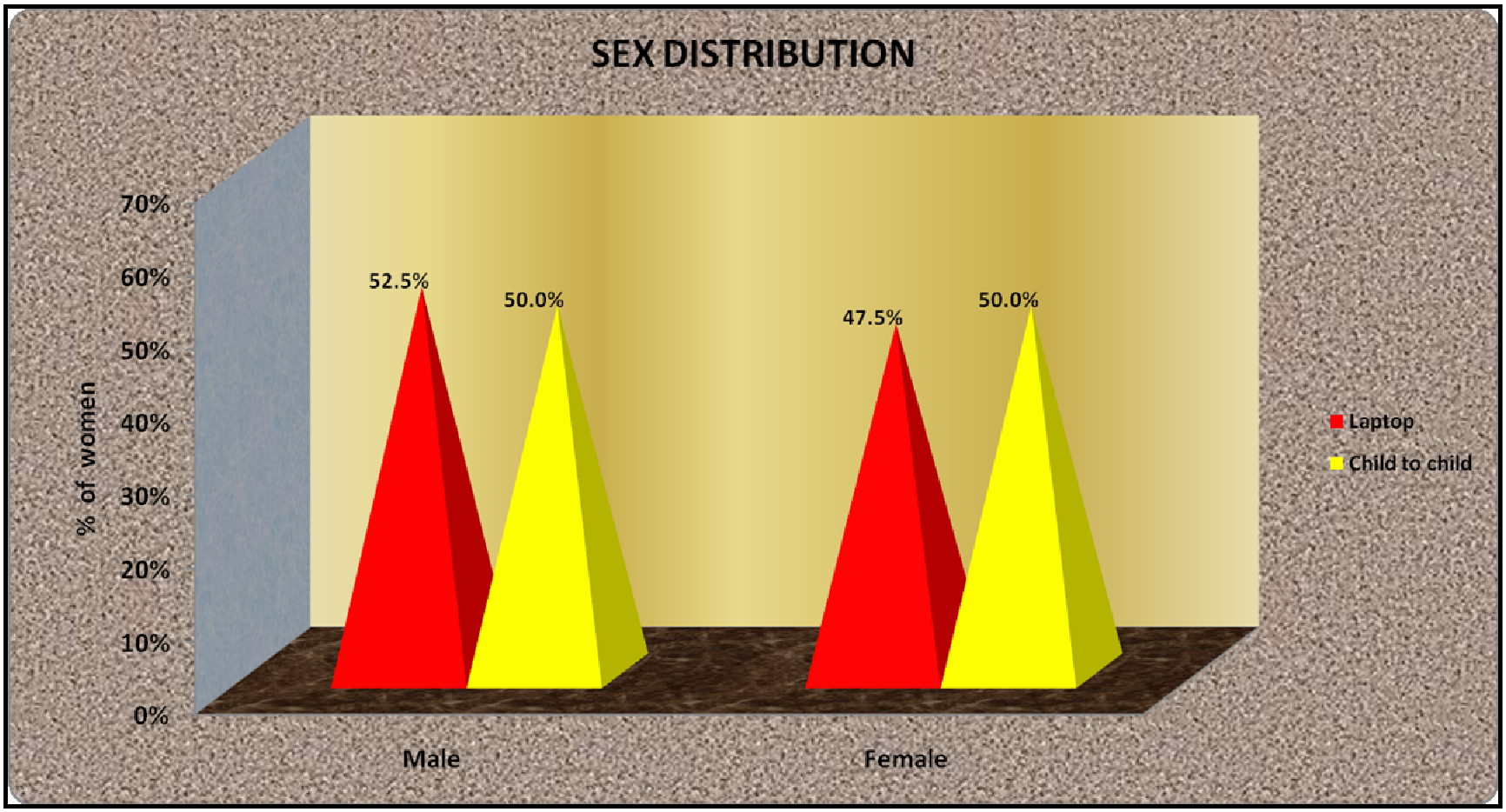
In group II with respect to the age majority of the children belongs to 11to 12 years of age and consist of 65.0%,in case of sex both female and male children are in same ratio(50.0%)and 67.5%.of the students studying in seventh standard .Regarding education status of the parents both father(37.5%) and mother(52.5%) achieved primary education. 35% of the families have two children in their family . The monthly income of the children's family implies that majority of the children's family are with monthly income of Rs.1000-2499 with 42.5%.

Fig-5. Distribution of Age of Children



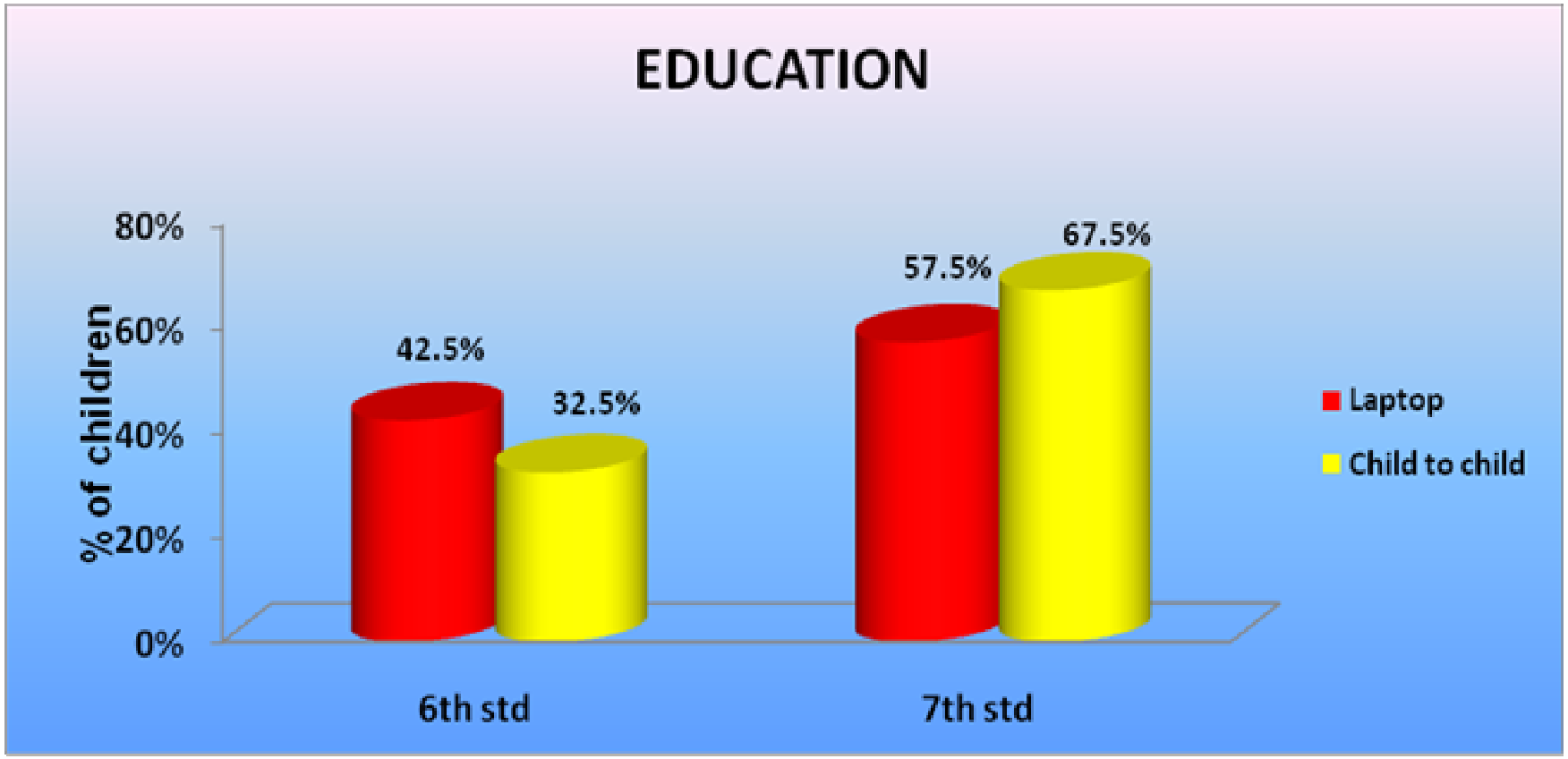
Above figure shows that majority of the children-52.5% in laptop assisted teaching group and 65% in child to child approach belong to age group 11-12 years.

Fig-6. Distribution of sex of Children



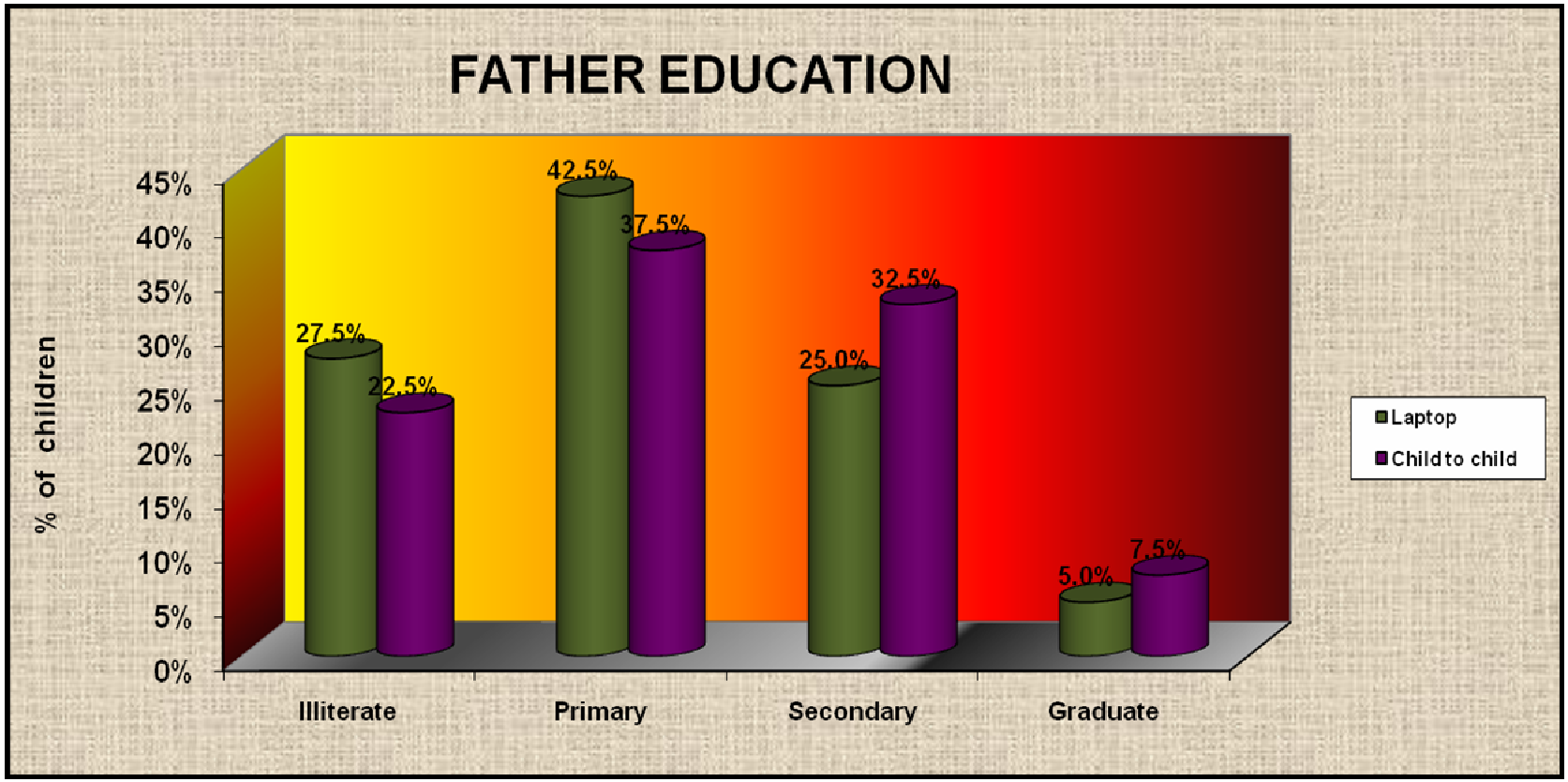
Above figure shows that male to female ratio is equal in child to child approach group(50%),in laptop assisted group more male children are present(52.5%).s

Fig 7. Distribution of Education of Children



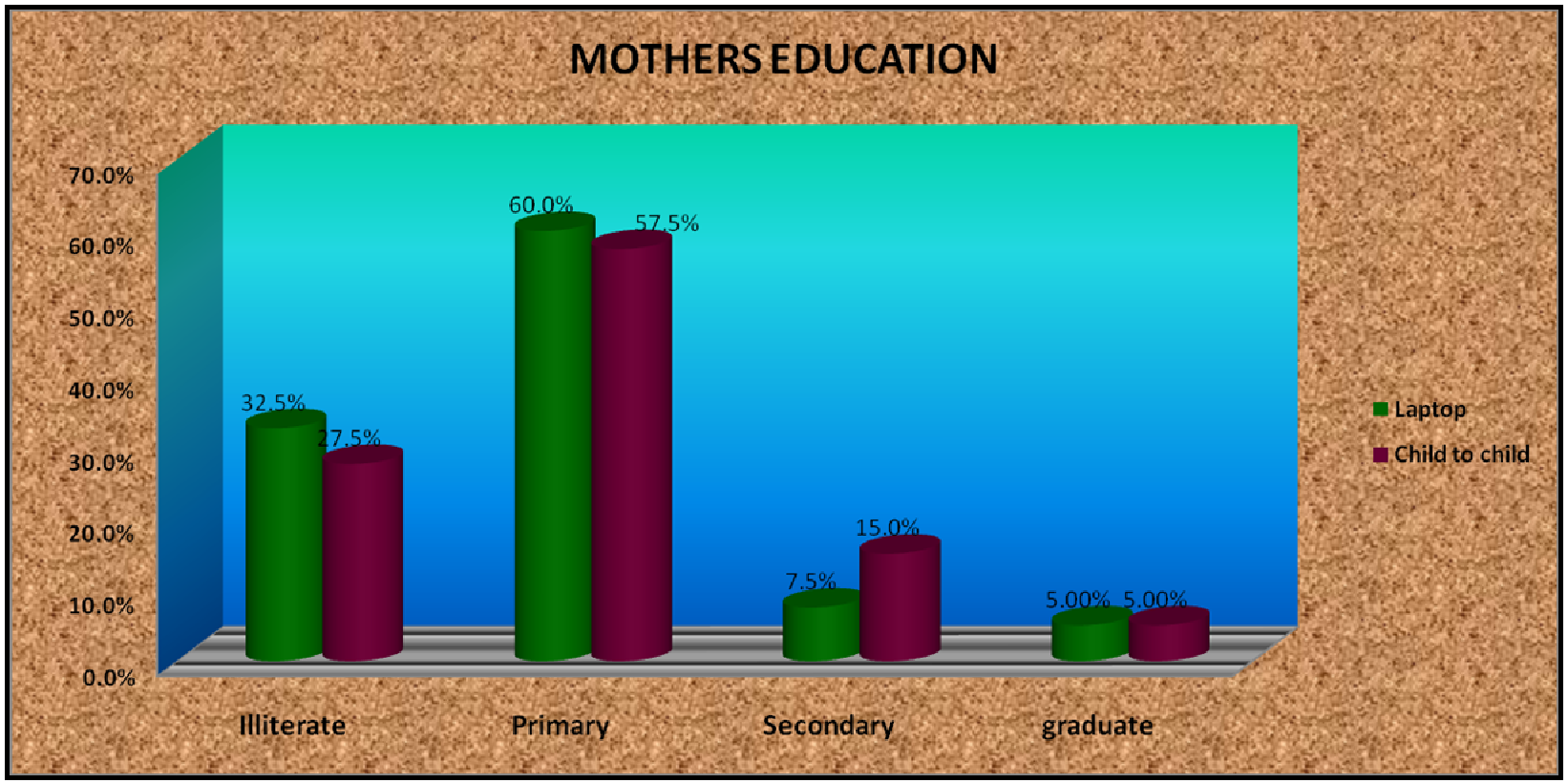
Above figure shows that majority of the children are studying in seventh standard in both the group

Fig 8. Distribution of Education Status of Children's Father



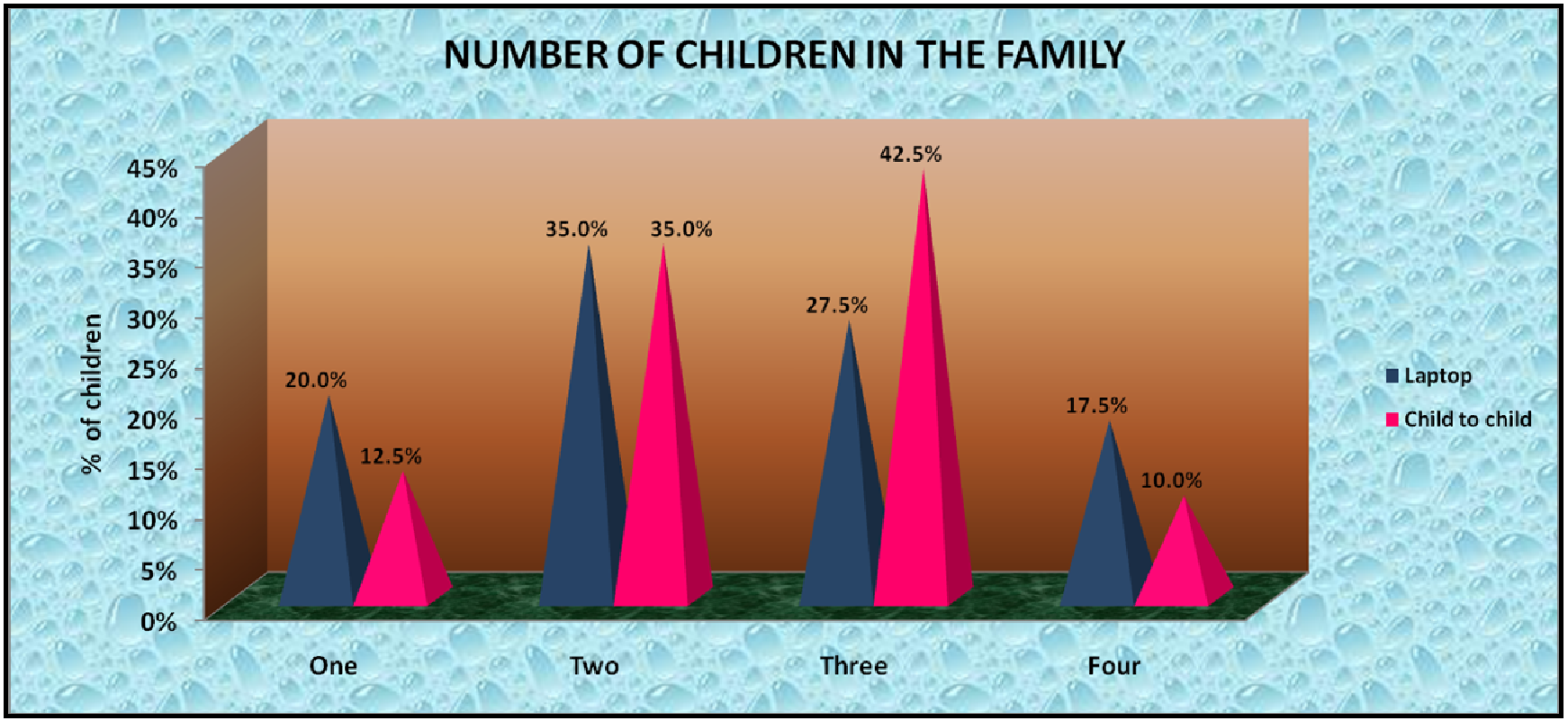
Above figure shows that majority of the children's father have completed only primary education(42.5%in laptop assisted teaching and 37.5% in child to child approach).

Fig .9. Distribution of Education Status of Children's Mother



Above figure shows that majority of the children's mother have completed only primary education(60.0%in laptop assisted teaching and 57.5% in child to child approach).

Fig 10. Distribution of Total Number of Children in the Family



Above figure shows that in laptop assisted teaching group majority (35%) of the children are second child and in child to child group majority (42.5%)of the children are third child of the family.

SECTION – II : ASSESSMENT OF THE PRETEST OR EXISTING LEVEL OF KNOWLEDGE REGARDING PERSONAL HYGIENE AMONG EXPERIMENTAL GROUP I (LAPTOP ASSISTED TEACHING)AND GROUP II(CHILD TO CHILD APPROACH)

Table 2. ***Pretest or existing level of knowledge mean score in both groups***

n=40

	Pre test		**Student's independent t-test**
	Mean	**SD**	
Laptop	12.20	4.47	t=0.29 P=0.76 not significant
Child to child	12.50	4.51	

* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

Laptop group- in pretest children are having 12.20 mean score ,

Child to child approach group- in pretest children are having 12.50 personal hygiene score ,

So, the difference is 0.30. This difference is small and it is not statistically significant. Statistical significance was assessed using student independent t-test.

Table-3: Percentage of Pretest or existing level of knowledge in both the groups

n=40

Level of knowledge	Laptop assisted teahing-GroupI		Child to child approach – Group II		Chi square test
	n	%	n	%	
Inadequate	31	77.5%	32	80.0%	$\chi 2=0.10$ P=0.95 Not significant
Moderate	9	22.5%	8	20.0%	
Adequate	0	0.0%	0	0.0%	
Total	40	100.0%	40	100.0%	

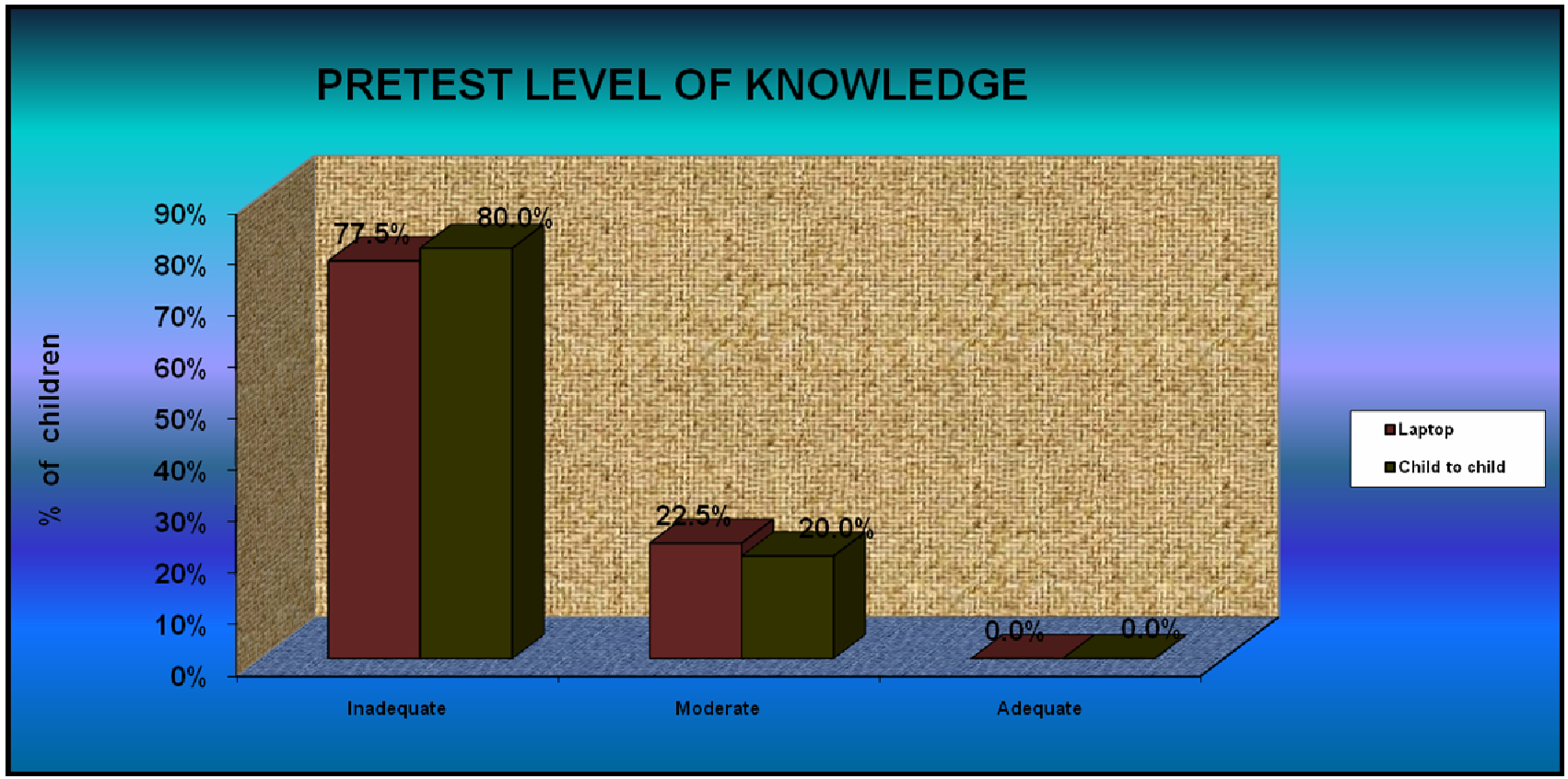
* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001.

In laptop assisted teaching group, 77.5% of the children are having inadequate knowledge, 22.5% are having moderate knowledge and none of them are having adequate knowledge.

In child to child group, 80.0% of the children are having inadequate knowledge, 20.0% are having moderate knowledge and none of them are having adequate knowledge.

It is not statistically significant difference. Statistical significance was calculated using chi square test.

Fig-11: Distribution of Existing or Pretest Level of Knowledge in Both the Groups



Above figure shows that majority of the students 77.5% in laptop assisted teaching 80%in child to child approach has inadequate knowledge regarding personal hygiene.

SECTION:III ASSESSMENT OF EFFECTIVENESS OF LAPTOP ASSISTED TEACHING REGARDING PERSONAL HYGIENE AMONG EXPERIMENTAL GROUP-I

Table 4. Mean score of pretest & post test knowledge level in experimental group I (laptop assisted teaching)

n=40

	Knowledge score		**Student's independent t-test**
	Mean	**SD**	
Pretest	12.20	4.47	t=10.50 P=0.001*** significant
Posttest	23.05	3.82	

* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

In pretest , children are having 12.20 knowledge score and in posttest, children are having 23.05knowledge score, so the difference is 10.50. This difference is large and it is statistically significant. Statistical significance was assessed using student independent t-test.

Table 5: Percentage of pretest & posttest level of knowledge in experimental group I (Laptop assisted teaching)

n=40

Level of knowledge	Pretest		Posttest		Chi square test
	n	%	n	%	
Inadequate	31	77.5%	0	0.0%	$\chi 2=8.4 P=0.03$ significant
Moderate	9	22.5%	12	30.0%	
Adequate	0	0.0%	28	70.0%	
Total	40	100.0%	40	100.0%	

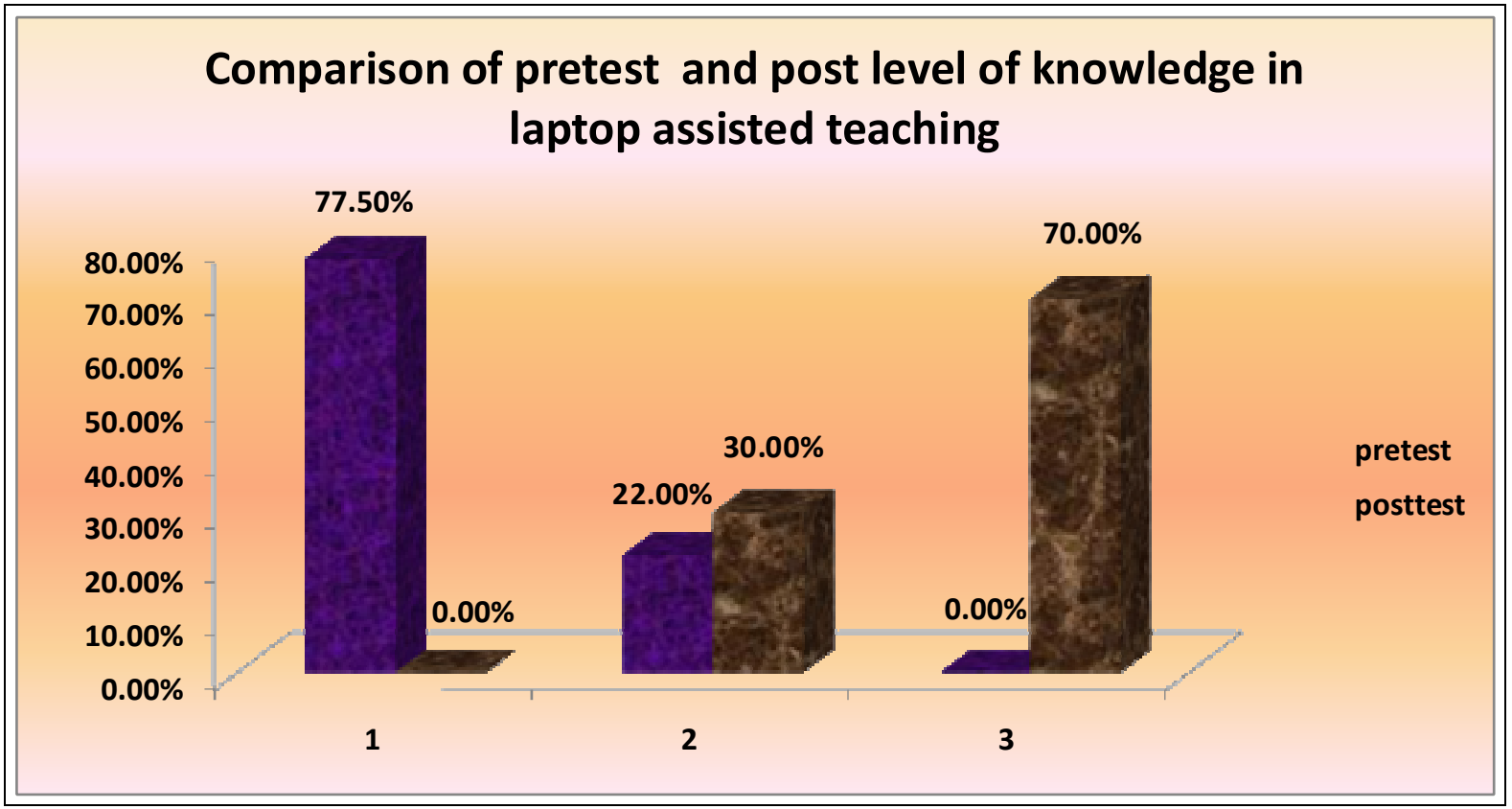
* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

In pretest, 77.5% of the children are having inadequate knowledge, 22.5% are having moderate knowledge and none of them are having adequate knowledge.

In posttest, none of the children are having inadequate knowledge, 30.0% are having moderate knowledge and 70% of them are having adequate knowledge .

It is statistically significant difference. Statistical significance was calculated using chi square test.

Fig 12. Distribution of pretest and posttest level of knowledge regarding personal hygiene among group I(Laptop assisted teaching)



Above picture shows that 70% of the students gained adequate knowledge after Laptop assisted teaching regarding personal hygiene.

SECTION-IV: ASSESSMENT OF THE EFFECTIVENESS OF CHILD TO CHILD APPROACH REGARDING PERSONAL HYGIENE AMONG EXPERIMENTAL GROUP II *(CHILD TO CHILD APPROACH)*.

Table 6: Mean score of pretest & posttest knowledge in experimental group II (child to child approach)

n=40

	Knowledge score		**Student's independent t-test**
	Mean	**SD**	
Pretest	12.50	4.51	t=14.47 P=0.001*** significant
Posttest	26.15	3.12	

* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

In pretest , children are having 12.50 mean score and in posttest , children are having 26.15 mean score , so the difference is 14.47. This difference is large and it is statistically significant. Statistical significance was assessed using student independent t-test.

Table 7: Percentage of pretest & posttest level of knowledge in experimental group II (child to child approach)

n=40

Level of knowledge	Pretest		Posttest		Chi square test
	n	%	n	%	
Inadequate	32	80.0%	0	0.0%	$\chi 2=10.37 P=0.01$ significant
Moderate	8	20.0%	4	10.0%	
Adequate	0	0.0%	36	90.0%	
Total	40	100.0%	40	100.0%	

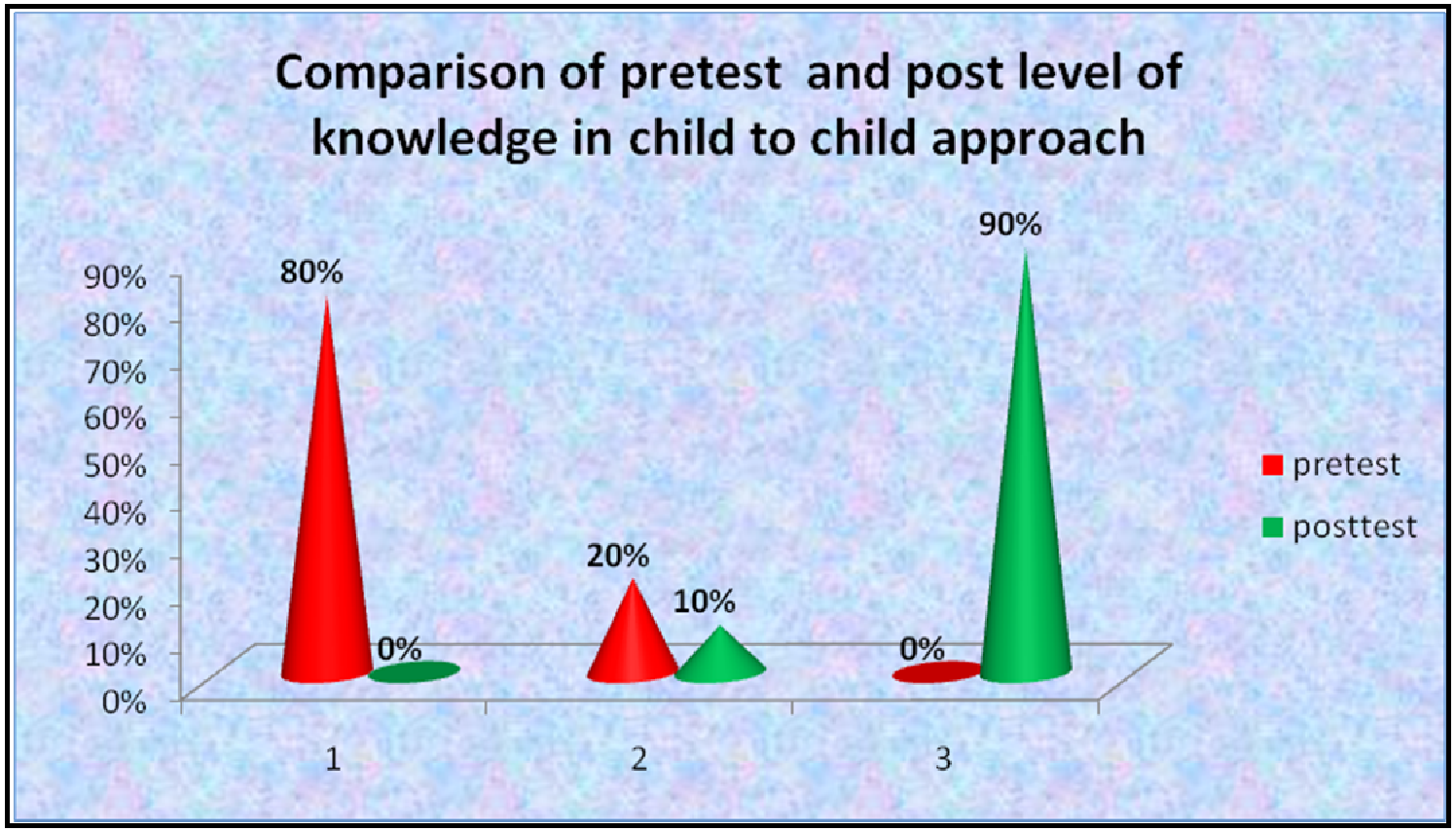
* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

In pretest, 80.0% of the children are having inadequate knowledge, 20% are having moderate knowledge and none of them are having adequate knowledge.

In posttest, none of the children are having inadequate knowledge, 10.0% are having moderate knowledge and 90% of them are having adequate knowledge .

It is statistically significant difference. Statistical significance was calculated using chi square test.

Fig .13 Distribution of Pretest and posttest level of knowledge in experimental group II (child to child approach)



Above picture shows that 90% of the students gained adequate knowledge after Child to child approach regarding personal hygiene.

SECTION:IV COMPARISON OF THE EFFECTIVENESS OF CHILD TO CHILD APPROACH AND LAPTOP ASSISTED TEACHING REGARDING PERSONAL HYGIENE AMONG SCHOOL AGE CHILDERN

Table 8: Comparison of percentage of post test level of knowledge score between both the groups.

n=40

Level of knowledge	Laptop		Child to child		Chi square test
	n	%	n	%	
Inadequate	0	0.0%	0	0.0%	χ^2=10.83 P=0.001 highly significant
Moderate	12	30.0%	4	10.0%	
Adequate	28	70.0%	36	90.0%	
Total	40	100.0%	40	100.0%	

* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

In laptop, none of the children are having inadequate knowledge, 30% are having moderate and 70% of them are having adequate knowledge.

In control group, none of the children are having inadequate knowledge, 10% are having moderate and 90% of them are having adequate knowledge.

This difference is large and it is statistically significant difference. Statistical significance was calculated using chi square test.

Table 9: Comparison of pretest andpost test mean scoreknowledge score between both the groups.

Knowledge	Laptop assisted teaching		Child to child approach		Student's Independent t-test
	Mean	SD	Mean	SD	
Pretest	12.20	4.47	12.50	4.51	t=0.29 p=0.76 not significant
Posttest	23.05	3.82	26.15	3.12	t=2.42 p=0.001** significant
Student Independent t-test	t=10.50P=0.001*** significant		t=14.47P=0.001*** significant		

* significant at P≤0.05 ** highly significant at P≤0.01 *** very high significant at P≤0.001

In pretest of laptop assisted teaching and child to child approach the mean and standard deviation difference using student independent t-test is t=0.29 p=0.76 which is not significant

In post test of laptop assisted teaching and child to child approach the mean and standard deviation difference using student independent t-test is t=2.42 p=0.001 which is highly significant.

The pre and post test mean difference in laptop assisted teaching is t=10.50P=0.001***Highly significant.

The pre and post test mean difference in child to child approach is t=14.47P=0.001***Highly significant.

This difference is large and it is statistically significant difference. Statistical significance was calculated using student independent t-test

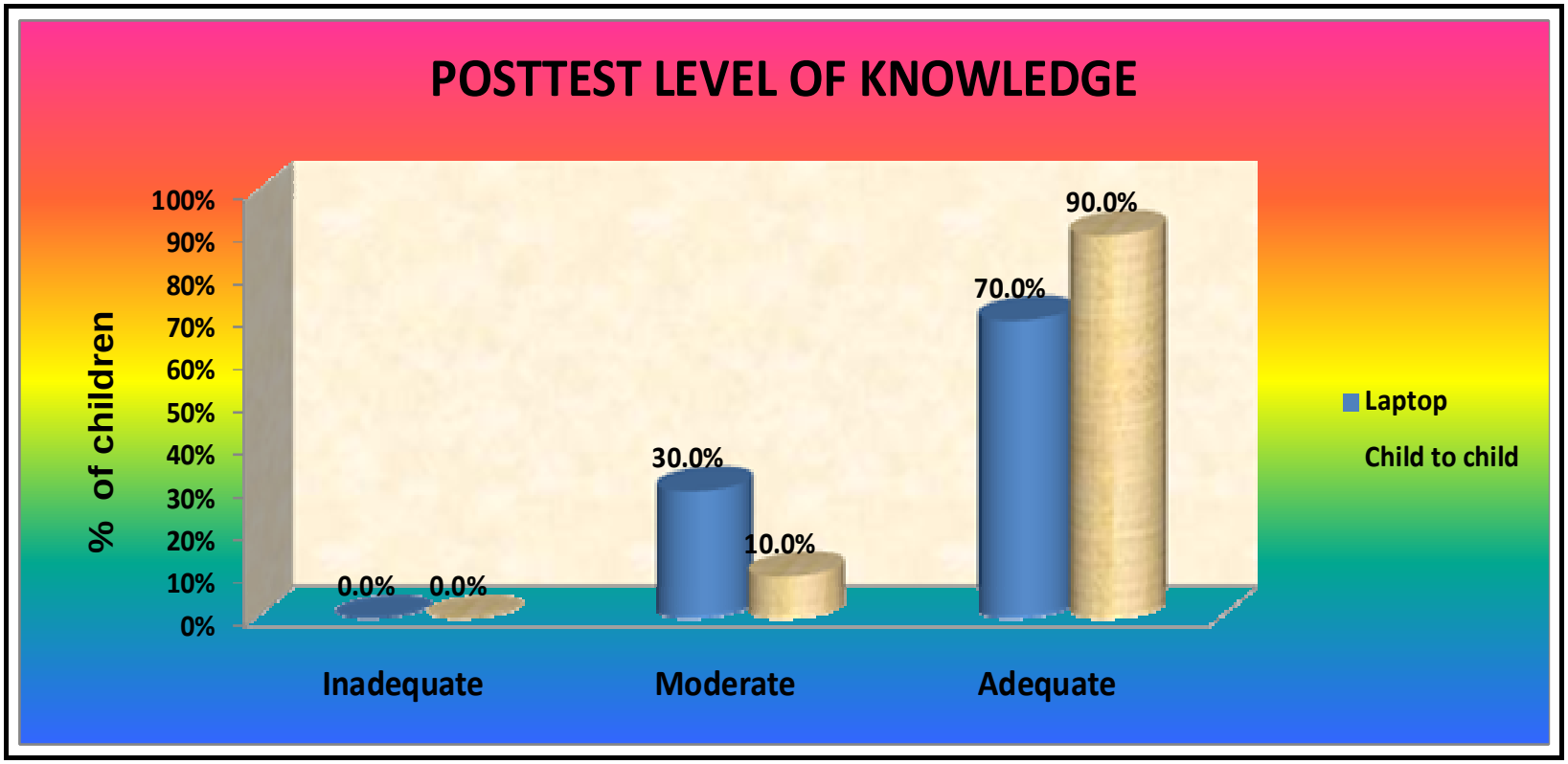
Table 10. Comparison of pre test and posttest difference score between both the groups.

n=40

		Max score	Personal hygiene score	Mean difference with 95% CI	Percentage difference with 95%CI
Laptop	Pretest	30	12.30	10.8 (8.7-12.9)	↓36.0% (29.0%-43.0%)
	Posttest	30	23.05		
Child to child	Pretest	30	12.50	13.6 (11.7-15.5)	↑45.3% (39.0%-51.6%)
	Posttest	30	26.15		

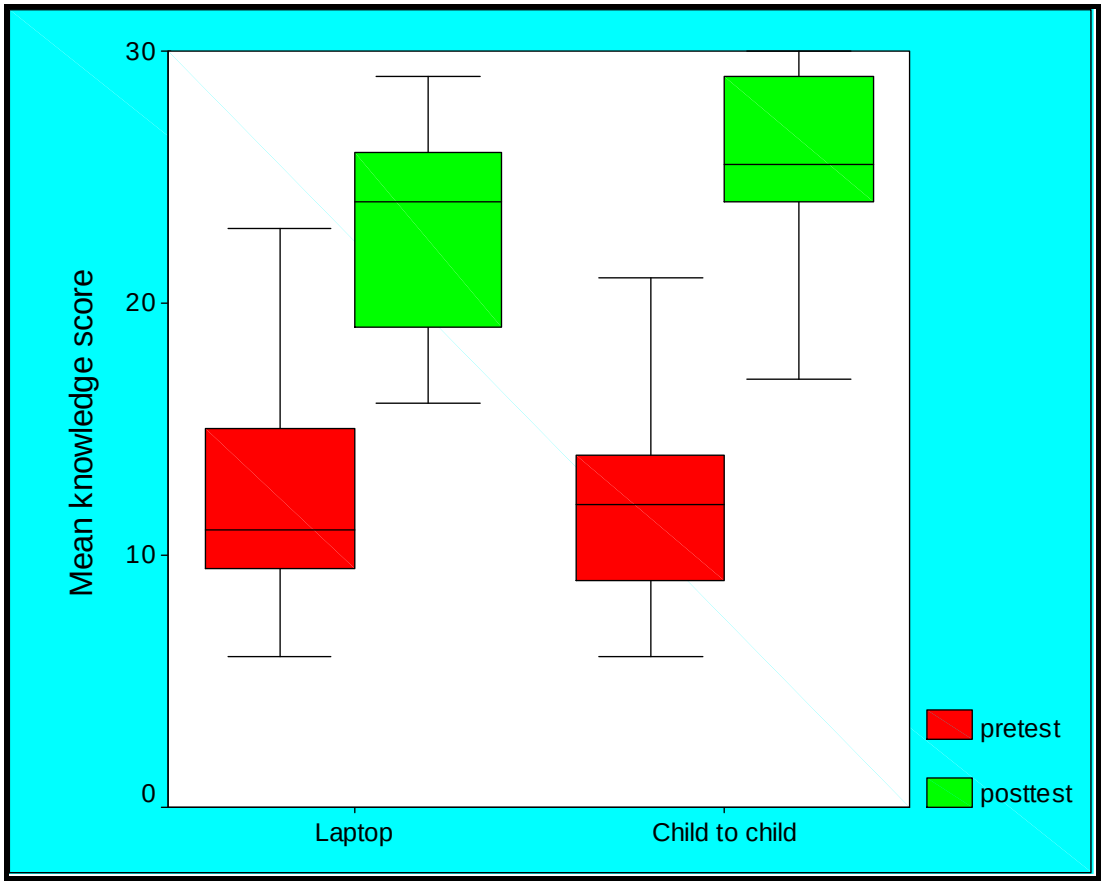
On an average, laptop children age gained 36% of knowledge and child to child method children are gained 45.3**.** Differences between pretest and posttest score was analysed using Mean difference with 95% CI and proportion with 95% CI and mean difference with 95% CI.

Fig .14.Comparison of Posttest level of knowledge in both the groups



The above figure depicts that 70% of students gained adequate knowledge after laptop assisted teaching and 90% of the students gained adequate knowledge after child to child approach.

Fig. 15: Box plot compares pretest and posttest mean knowledge score



The above box plot compares the pretest and post test knowledge in both laptop assisted teaching group and child to child approach group

SECTION-VI : ASSOCIATION OF THE LEVEL OF KNOWLEDGE WITH THE SELECTED DEMOGRAPHIC VARIABLES OF CHILD TO CHILD APPROACH AND LAPTOP ASSISTED TEACHING AMONG SCHOOL AGE CHILDREN

Table 11: Association between level of knowledge gain score and demographic variables (laptop assisted teaching)

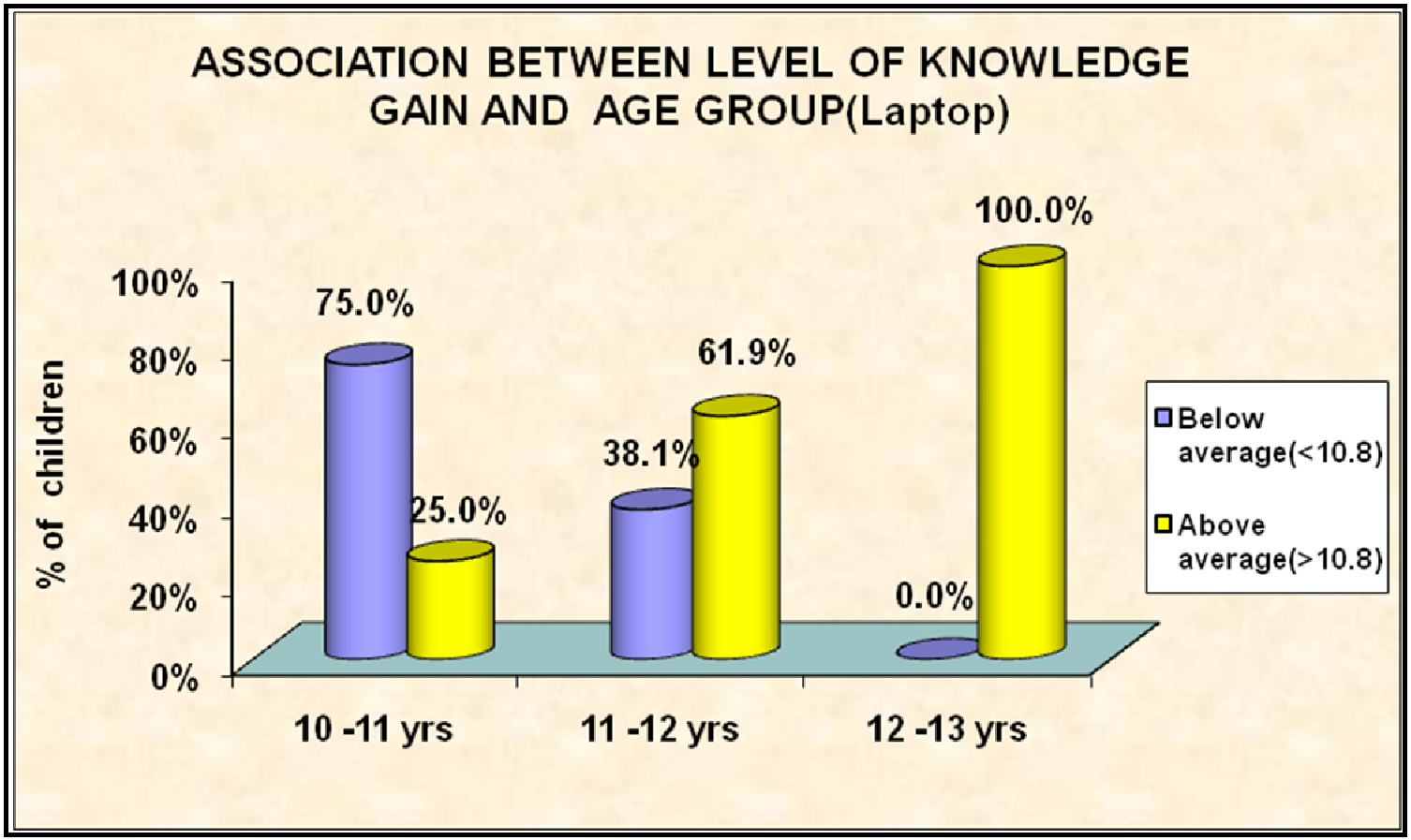
Demographic variables		Level of knowledge gain				Ttotal	Chi square test
		Below average(<10.8)		Above average(>10.8)			
		n	%	n	%		
Age	10 -11 yrs	12	75.0%	4	25.0%	116	χ^2=8.19 P=0.02*
	11 -12 yrs	8	38.1%	13	61.9%	221	
	12 -13 yrs	0	0.0%	3	100.0%	33	
Sex	Male	11	52.4%	10	47.6%	221	χ^2=0.10 P=0.75
	Female	9	47.4%	10	52.6%	119	
Class	6th std	12	70.6%	5	29.4%	117	χ^2=5.01 P=0.03*
	7th std	8	34.8%	15	65.2%	223	
Father's education status	Illiterate	5	45.5%	6	54.5%	111	χ^2=1.02 P=0.79
	Primary	10	58.8%	7	41.2%	117	
	Secondary	4	40.0%	6	60.0%	110	
	Graduate	1	50.0%	1	50.0%	22	
Mother's education status	Illiterate	6	46.2%	7	53.8%	113	χ^2=0.57 P=0.74
	Primary	13	54.2%	11	45.8%	224	
	Secondary	1	33.3%	2	66.7%	33	
	graduate	2	5%	2	5%	22	

Demographic variables		Level of knowledge gain				Ttotal	Chi square test
		Below average(<10.8)		Above average(>10.8)			
		n	%	n	%		
Total no. of children in the family	One	3	37.5%	5	62.5%	88	χ^2=0.73 P=0.86
	Two	7	50.0%	7	50.0%	114	
	Three	6	54.5%	5	45.5%	111	
	Four	4	57.1%	3	42.9%	77	
Family's monthly income	> Rs.5000	3	50.0%	3	50.0%	66	χ^2=0.22 P=0.97
	Rs.2500 - 4999	7	50.0%	7	50.0%	114	
	Rs.1000-2499	6	46.2%	7	53.8%	113	
	< Rs.1000	4	57.1%	3	42.9%	77	

Gain score= posttest score- pretest score

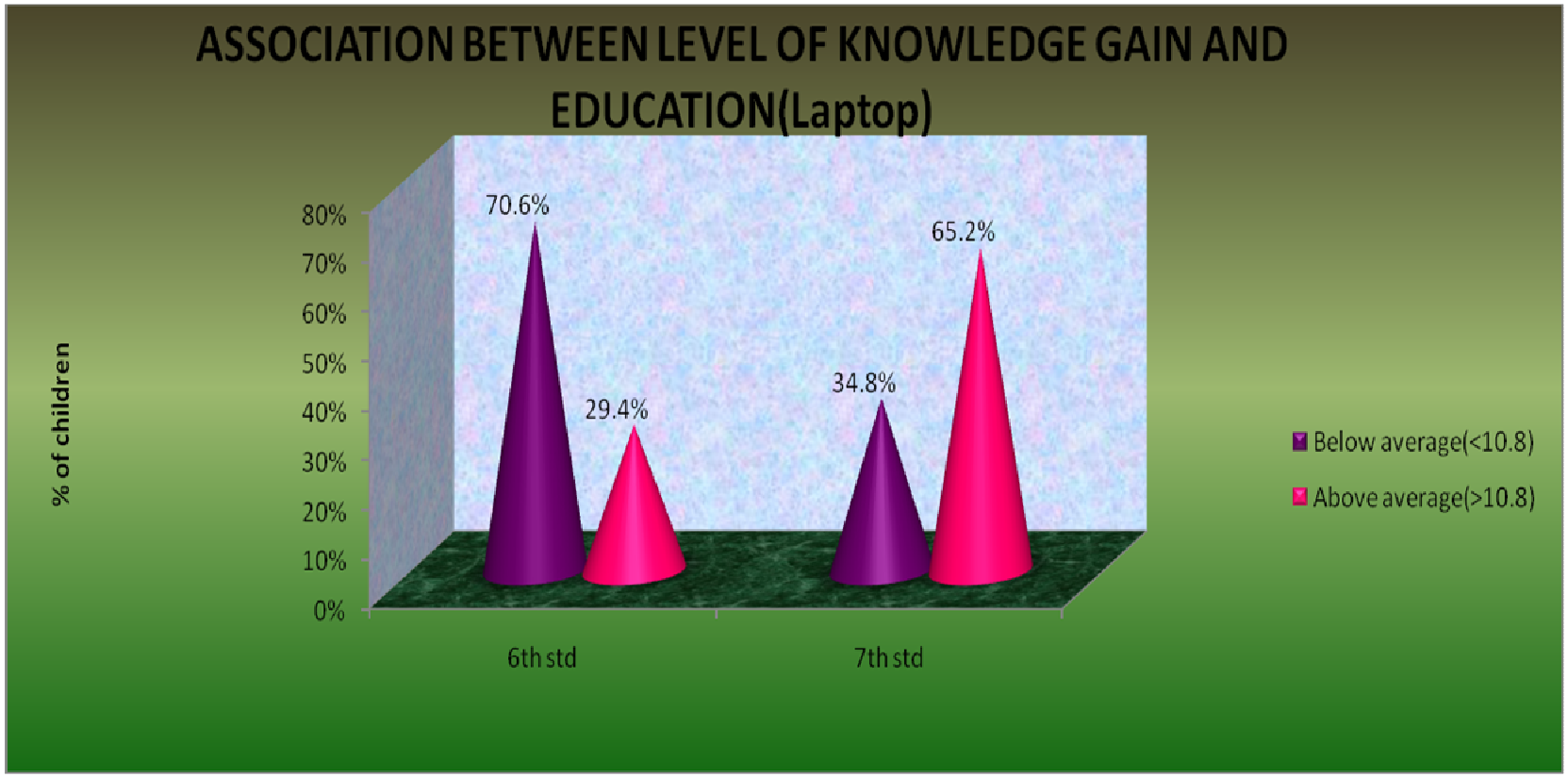
The above table shows the association between level of knowledge gain score and their demographic variables. Elders , more educated gained more knowledge score. Statistical significance was calculated using chi square test

Fig.16. Association between level of knowledge gain and age in group I (laptop assisted teaching)



The above figure shows that elder children under 12-13yearsgained more knowledge 100%.

Fig. 17. Association between level of knowledge gain and students education laptop assisted teaching



Above figure shows that students studying in seventh standard(63%) gained more knowledge

Table 12: Association between level of knowledge gain score and demographic variables (child to child approach)

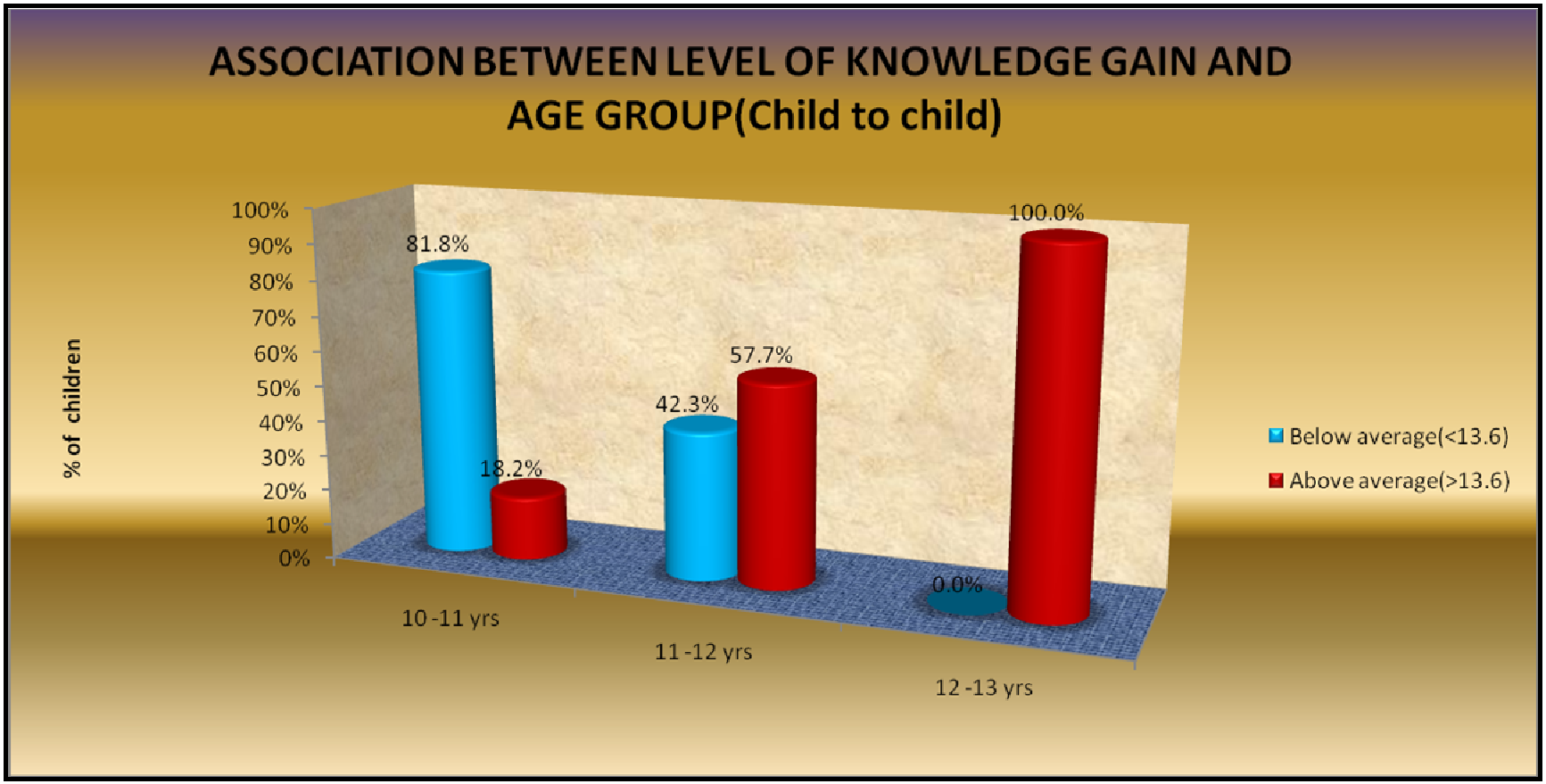
Demographic variables		Level of knowledge gain				Total	Chi square test
		Below average(<13.6)		Above average(>13.6)			
		n	%	n	%		
Age	10 -11 yrs	9	81.8%	2	18.2%	11	χ^2=8.07 P=0.02*
	11 -12 yrs	11	42.3%	15	57.7%	26	
	12 -13 yrs	0	0.0%	3	100.0%	3	
Sex	Male	14	70.0%	6	30.0%	20	χ^2=6.40 P=0.01*
	Female	6	30.0%	14	70.0%	20	
Class	6th std	10	76.9%	3	23.1%	13	χ^2=5.58 P=0.02*
	7th std	10	37.0%	17	63.0%	27	
Father's education status	Illiterate	5	55.6%	4	44.4%	9	χ^2=1.20 P=0.75
	Primary	8	53.3%	7	46.7%	15	
	Secondary	5	38.5%	8	61.5%	13	
	Graduate	2	66.7%	1	33.3%	3	
Mother's education status	Illiterate	6	54.5%	5	45.5%	11	χ^2=1.14 P=0.56
	Primary	10	43.5%	13	56.5%	23	
	Secondary	4	66.7%	2	33.3%	6	
	Graduate	2	5%	2	5%	2	

Demographic variables		Level of knowledge gain				Total	Chi square test
		Below average(<13.6)		Above average(>13.6)			
		n	%	n	%		
Total no. of children in the family	One	1	20.0%	4	80.0%	5	$\chi 2=3.61$ P=0.30
	Two	8	57.1%	6	42.9%	14	
	Three	10	58.8%	7	41.2%	17	
	Four	1	25.0%	3	75.0%	4	
Family's monthly income	> Rs.5000	1	25.0%	3	75.0%	4	$\chi 2=4.30$ P=0.23
	Rs.2500 - 4999	10	71.4%	4	28.6%	14	
	Rs.1000-2499	7	41.2%	10	58.8%	17	
	< Rs.1000	2	40.0%	3	60.0%	5	

Gain score=post test score-pre test score

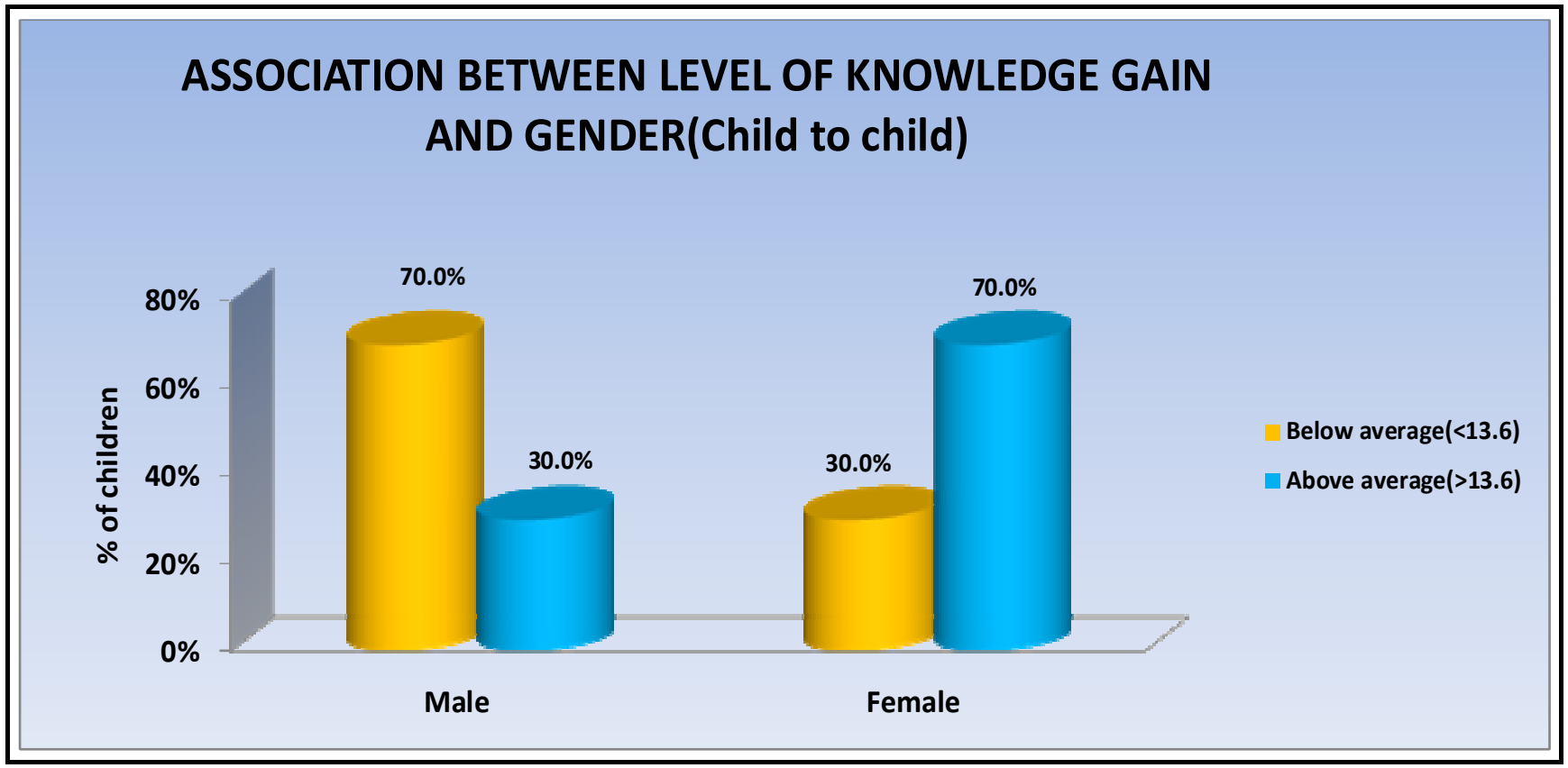
The above table shows the association between level of knowledge gain score and their demographic variables. Elders , female and more educated gained more knowledge score. Statistical significance was calculated using chi square test

Fig. 18. Association between level of knowledge gain and age in group II (child to child approach)



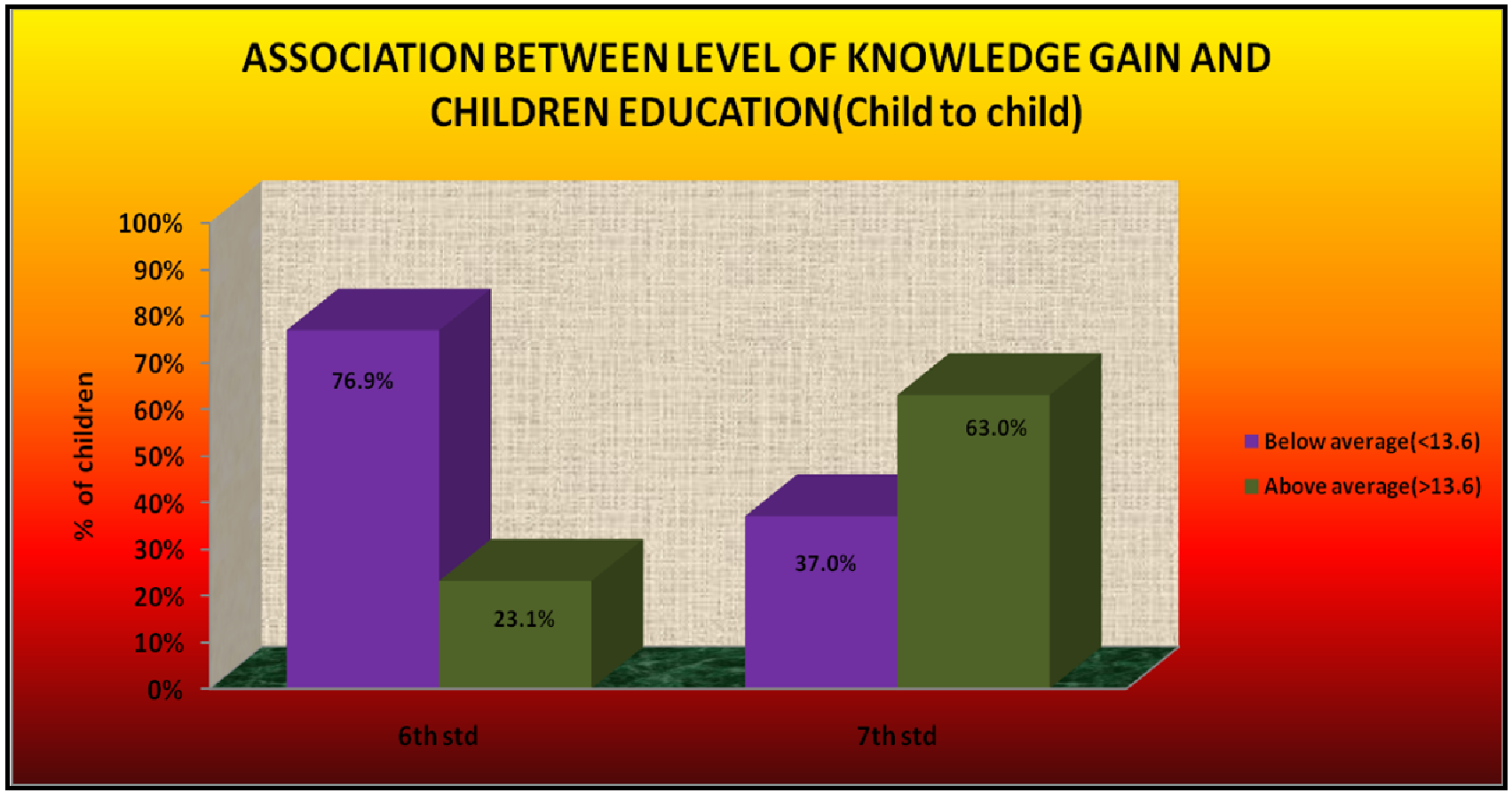
Above figure shows that female students (70%) gained more knowledge

Fig.19. Association between level of knowledge gain and gender in group II (Child to child approach)



Above figure shows that female students (70%) gained more knowledge

Fig.20.Association between level of knowledge gain and children education in group II (child to child approach group).



Above figure shows that students studying in seventh standard(63%) gained more knowledge

CHAPTER-V
DISCUSSION

This chapter deals with the findings of the study based on the interpretation of the statistical analysis. The findings are discussed in relation to the objectives of the study. The findings are supported by the review of literature.

The purpose of the study is to assess the Effectiveness of laptop assisted teaching child to child approach versus child to child approach among school age children in Hindu Union Middle School at Choolai in Chennai.

Characteristics of the demographic variables:

The characteristics of the demographic variables in experimental group I (laptop assisted teaching) and experimental group II (child to child approach) are described in terms of frequency and percentage distribution

In Experimental group I(laptop assisted teaching) with respect to the age, majority of the children belongs to 11to 12 years of age and consist of 52.5%,in case of sex there were more male children with 52.5% studying in seventh standard 57.7%.Regarding education status of the parents both father(42.5%) and mother(55%) achieved primary education.35% of the children are second child of their family. The monthly income of the children's family implies that majority of the children's family are with monthly income of Rs.2500-4999 with 35%

In Experimental group II(child to child approach) with respect to the age majority of the children belongs to 11to 12 years of age and consist of 65.0%,in case of sex both female and male children with 50.0% and studying in seventh standard 67.5%.Regarding education status of the parents both father(37.5%) and mother(52.5%) achieved

primary education.35% of the children are second child of their family.The monthly income of the children's family implies that majority of the children's family are with monthly income of Rs.1000-2499 with 42.5

The first objective was to assess the existing level of knowledge regarding personal hygiene among school age children before the intervention for both the groups.

The investigator used semi structured questionnaire to assess the existing level of knowledge regarding personal hygiene among school age children before the intervention for both the groups with the total sample number 80.

The finding of study shows that majority of the students have inadequate knowledge regarding personal hygiene. In experimental group I(Laptop assisted teaching group) 77.5% (31)of the students have inadequate knowledge , 22.5%(9) of the children have moderate knowledge and 0.0% of the children have adequate knowledge regarding personal hygiene .And in experimental group II(child to child approach group) 80.0%(32) of the students have inadequate knowledge , 20.0%(8) of the children have moderate knowledge and 0.0% of the children have adequate knowledge regarding personal hygiene.

Thus it is evident that in pretest, there is no statistically significant difference between both the groups knowledge mean score (group I -12.20 and group II-12.50) and SD score (group I-4.47 and group II -4.15)

Therefore, statistically, the results suggest that there is poor or inadequate knowledge regarding personal hygiene among school age children of Hindu Union Middle School at Choolai in Chennai-08.Hence there is a need for education regarding personal hygiene.

The second objective is to determine the effectiveness of laptop assisted teaching regarding personal hygiene among school age children.

In group I (Laptop assisted teaching),in pretest 77.5% (31)of the students have inadequate knowledge , 22.5%(9) of the children have moderate knowledge and 0.0% of the children have adequate knowledge regarding personal hygiene .In post test majority of the students that is 70.0% (28) of the students have adequate knowledge , 30.0%(12) of the children have moderate knowledge and 0.0% of the children have inadequate knowledge regarding personal hygiene after conducting laptop assisted teaching with slides of pictures regarding regarding personal by the investigator.The pretest mean score was12.20 with the standard deviation 4.47,and post test mean score was23.05 with standard deviation of 3.82.The difference in pre test and post test knowledge is statistically highly significant(student's independent t test t=10.50.p=0.001).It is clear from the above findings that teaching with laptop by the investigator has improved the knowledge regarding personal hygiene.

The find are consistent with the study conducted by authors ***Navarre et all (2007),*** Studied about the effectiveness of laptop assisted teaching in the field of health have improved the knowledge among the students.

The third objective is to determine the effectiveness of child to child approach regarding personal hygiene among school age children.

In group II (Child to child approach group),in pretest80.0% (32)of the students have inadequate knowledge , 20.0%(8) of the children have moderate knowledge and 0.0% of the children have adequate knowledge regarding personal hygiene .In post test majority of the students that is 90.0%(36) of the students have adequate knowledge , 10.0%(4) of the children have moderate knowledge and 0.0% of the

children have inadequate knowledge regarding personal hygiene .The pretest mean score was12.50 with the standard deviation 4.51,and post test mean score was26.15 with standard deviation of 3.12.The difference in pre test and post test knowledge is statistically highly significant(student's independent t test t=14.47.p=0.001).It is clear from the above findings that child to child approach done by selecting 8 change agents from group I and making them to teach other 40 samples in group II with the same laptop slides has improved the knowledge regarding personal hygiene.

The findings are consistent with the study conducted by author ***Barlett Kathy (2003)*** suggested the effectiveness of child to child approach in helping children to become knowledgeable and competent concerning to health and hygiene ,through activity based learning that can be applied to their everyday lives.

The stated hypothesis (H-1) that there is a significant improvement in knowledge regarding personal hygiene among school age children by using laptop assisted teaching and child to child approach has been proved.

The fourth objective is to compare the effectiveness of laptop assisted teaching and child to child approach regarding personal hygiene among school age children.

On comparison, the post test mean score in laptop assisted teaching was 23.05 with standard deviation of 3.82 and in child to child approach post test mean score was26.15 with standard deviation of 3.12 . There is significant difference between the two groups, t=2.42, p=0.01.

On an average, in child to child approach, students have gained 45.3% adequate knowledge. On an average, in laptop assisted teaching students have gained 36.0% adequate knowledge .

It shows that child to child approach is more effective than, in laptop assisted teaching in improving the knowledge regarding personal hygiene among school age children.

The stated hypothesis (H-2)that there is a significant difference in improvement of knowledge regarding personal hygiene among school age children between laptop assisted teaching and child to child approach among school age children.

The fifth objective is to associate the level of knowledge with the selected demographic variables of laptop assisted teaching among school age children

Socio demographic variables of the children such as age, sex, education status, father's education, mother's education total number of children in the family, family income are associated with post test level of knowledge among laptop assisted teaching group participants. Elders (12-13 years) Chi square test shows $\chi 2=8.19$ P=0.02*, standard studying(7^{th} standard) Chi square test shows$\chi 2=5.01$ P=0.03*.All these results shows that there is relationship between knowledge gain and and these variables.

Therefore, statistically the results suggest that there is association between demographic data of students with knowledge regarding personal hygiene score after laptop assisted teaching.

The stated hypothesis (H-3): That there will be significant association between the post test level of knowledge with their selected demographic variables of school age children by using child to child approach regarding personal hygiene has been proved.

The sixth objective is to associate the level of knowledge with the selected demographic variables of child to child approach among school age children

Socio demographic variables of the children such as age, sex, education status, father's education, mother's education total number of children in the family, family income are associated with post test level of knowledge among laptop assisted teaching group participants. Elders (12-13 years) Chi square test shows $\chi 2=8.07$ P=0.02*,sex(female) Chi square test shows $\chi 2=6.40$ P=0.01*, standard studying(7^{th} standard) Chi square test shows$\chi 2=5.58$ P=0.02**.All these results shows that there is relationship between knowledge gain and these variables.

Therefore, statistically the results suggest that there is association between demographic data of students with knowledge regarding personal hygiene score after child to child approach.

The stated hypothesis (H-4)that there will be significant association between the post test level of knowledge with the selected demographic variables of school age children by using laptop assisted teaching regarding personal hygiene.

CHAPTER-VI
SUMMARY AND CONCLUSION

"In literature and in life we ultimately pursue,

not conclusions, but beginnings."

-Sam Tanenhaus

This chapter deals with the summary of the study and the conclusions drawn. It clarifies the limitations of the study. The implications and recommendations are given for different areas of Nursing such as practice, education, research and administration in the Health care delivery system.

6.1. SUMMARY

The purpose of the study was to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in selected Corporation School at Choolai in Chennai.

Personal hygiene entails bathing regularly, keeping your hair clean, trimming fingernails and toenails, brushing your teeth and using deodorant. Personal hygiene can enhance your self-confidence and improve your chances of success in many areas of your life. A lack of it can have certain social and health ramifications. Psychological problems can often spur bad hygiene practices. Poor hygiene practices and inadequate sanitary conditions play major roles in the increased burden of communicable diseases within developing countries. A large fraction of the world's illness and death is attributable to communicable diseases Sixty-two percent and 31% of all deaths in South Asia, respectively, are caused by infectious. This trend is especially notable in developing countries where acute respiratory and intestinal infections are the primary causes of morbidity and mortality among young children

.Inadequate sanitary conditions and poor hygiene practices play major roles in the increased burden of communicable disease within these developing countries.

Child-to-Child is an approach to health promotion and community development that is led by children. It is based on the belief that children can be actively involved in their communities and in solving community problems. Child-to-Child projects involve children in activities that interest, challenge and empower them. In so doing, the approach "encourages and enables children to play an active and responsible role in the health and development of themselves, other children, their families and communities".

Hence this study was undertaken to determine the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in selected corporation school at choolai in Chennai.

Objectives of the study were

- To assess the existing level of knowledge regarding personal hygiene among school age children
- To assess the effectiveness of laptop assisted teaching regarding personal hygiene among school age children.
- To assess the effectiveness of child to child approach regarding personal hygiene among school age children.
- To compare the effectiveness of child to child approach and laptop assisted teaching regarding personal hygiene among school age children.

- To associate the level of knowledge with the selected demographic variables of laptop assisted teaching among school age children.

- To associate the level of knowledge with the selected demographic variables of child to child approach among school age children.

Hypothesis formulated were

H-1 : There is a significant improvement in knowledge among school age children by using laptop assisted teaching regarding personal hygiene

H-2 : There is a significant improvement in knowledge among school age children by using child to child approach regarding personal hygiene

H-3 : There will be significant association between the post test level of knowledge with the selected demographic variables of school age children by using laptop assisted teaching regarding personal hygiene

H-4 : There will be significant association between the post test level of knowledge with the selected demographic variables of school age children by using child to child approach regarding personal hygiene.

Assumptions of the study were

- School age children are in need of proper information regarding the importance of personal hygiene.

- The child to child approach and laptop assisted teaching programme will be helpful to improve the knowledge of school age children regarding personal hygiene..

Review of literature was

Done to understand the need of personal hygiene for school age children and to know the effectiveness of child to child approach and laptop assisted teaching in improving the knowledge regarding personal hygiene.

Methodology of the study was

Quantitative approach ,quasi experimental design ,sample size is 80.40 in laptop assisted teaching group,40 in of child to child approach group, selected by simple random sampling technique by lottery method from the sample frame within inclusion criteria.

Data was collected by structured interview for demographic profile of the school age children.

Pretest was done in both groups using the structured questionnaire with 30 questions related to personal hygiene for school age children. Intervention- Laptop assisted teaching regarding personal hygiene was given to experimental group I .Post test was conducted with same 30 questions. 8 change agents were selected from laptop assisted group with the class teacher based on academic performance,leadership quality,communication skill, co-curricular and extra- curricular activity skill and the children who have secured above 25 score out of 30 in post-test using the same questionnaire.Teaching regarding personal hygiene was done to child to child approach group by these 8 change agents and post test was conducted

The study was carried out in Hindu Union Middle School at Choolai in Chennai for one month duration from with permission of Head of the Department and Ethical Committee approval.Informed consent obtained from the children and information about the study was given to them.

Pilot study was conducted to find out the feasibility of conducting the study and refinement of tools.

6.2. MAJOR FINDINGS OF THE STUDY

The findings of the study were

The findings show that overall knowledge scores are poor in pretest for both child to child approach group and lap top assisted teaching group.

- Most of the children are in age group of 11-12 years with 52.5%(21) in lap top assisted teaching group and 65.0%.(26) in child to child approach group respectively
- Majority of the children were males 52.5.% (21) in laptop assisted teaching group and both male and female ratio is same 50.0%(20) in child to child approach group.
- Majority of the children belong to the seventh standard 57.7%(23) in lap top assisted teaching group and 67.5%(27) in child to child approach respectively
- Majority of the children's father attained primary education 42.5% (17)in lap top assisted teaching group and education 37.5% (15) in child to child approach group respectively.
- Majority of the children's mother attained primary education 55%(22) in lap top assisted teaching group and 52.5% (21) in child to child approach group respectively.
- Most of the study subjects are second child of their family in both child to child approach group and in lap top assisted teaching group respectively with 35%(14)

- Majority of the children's family is with income Rs.2500-4999 35%(14) in laptop assisted teaching and 42.5%(17) in child to child approach

The finding of the study shows that the overall knowledge scores inadequate in both the groups in pretest. In lap top assisted teaching group, 77.5% (31) of the children have inadequate knowledge , 22.5%(9) of the children have moderate knowledge and 0.0% of the children have adequate knowledge regarding personal hygiene . The mean knowledge score was 12.50 in child to child approach group and 12.20 in lap top assisted teaching group.

In child to child approach group, 80.0%(32) of the children have inadequate knowledge , 20.0%(8) of the children have moderate knowledge and 0.0% of the children have adequate knowledge regarding personal hygiene.

Thus it is evident that in pretest, there is no statistically significant difference between lap top assisted teaching and child to child approach group proved by children's independent t-test t=0.29 p=0.76.

In lap top assisted teaching ,in post test majority of the children that is 70.0%(28) of the children have adequate knowledge regarding personal hygiene after conducting laptop assisted teaching with slides of pictures regarding personal by the investigator. The post test mean score was23.05 with standard deviation of 3.82.The difference in pre test and post test knowledge is statistically highly significant(student's independent t test t=10.50.p=0.001).It is clear from the above findings that teaching with laptop by the investigator has improved the knowledge regarding personal hygiene.

In child to child approach group, in post test majority of the children that is 90.0%(36) of the children have adequate knowledge regarding personal hygiene The post test mean knowledge score was 26.15 with a standard deviation of 3.12.The difference in pretest and post test knowledge score is statistically significant (student's independent t test t=14.47, p= 0.001).It is clear from the above findings that intervention with child to child approach regarding personal hygiene has improved the knowledge adequately.

On comparison, the post test mean score in laptop assisted teaching was 23.05 with standard deviation of 3.82 and in child to child approach post test mean score was26.15 with standard deviation of 3.12 . There is significant difference between the two groups, t=2.42, p=0.01.

On an average, in child to child approach, 90% of the children have gained adequate knowledge. And in laptop assisted teaching 70% o the children have gained adequate knowledge .It shows that child to child approach is more effective than laptop assisted teaching in improving the knowledge regarding personal hygiene among school age children.

Socio demographic variables are associated with post test level of knowledge among laptop assisted teaching group children and child to child approach group. Elders (12-13 years) Chi square test shows $\chi 2=8.19$ P=0.02*, standard studying(7th standard) Chi square test shows$\chi 2=5.01$ P=0.03*in laptop assisted teaching group.And in child to child approach group Elders (12-13 years) Chi square test shows $\chi 2=8.07$ P=0.02*,sex(female) Chi square test shows $\chi 2=6.40$ P=0.01*, standard studying(7th standard) Chi square test shows$\chi 2=5.58$ P=0.02*.

Therefore, statistically the results suggest that there is association between demographic character of children with knowledge regarding

personal hygiene score after laptop assisted teaching and child to child approach.

6.3. IMPLICATIONS

The study has implications, guidelines, and suggestions for nursing practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE

- The study results will help the nursing personnel to understand the need of personal hygiene among school children .
- Nurse can use the Child to child approach to improve their goals of health promotion and education about issues such as nutrition, healthy lifestyles etc.
- School health nurse can motivate the school teachers to educate on importance of personal hygiene and other health aspect by using innovative approaches to make the children to participate and involve .
- Nurses can emphasis on implementation of information, education, communication to create awareness to the children, parents and teachers regarding importance of personal hygiene.

NURSING EDUCATION

- Nurse educators should teach the children and include in the syllabus about impact of personal hygiene on quality of life of children.
- Develop different teaching method with appropriate and innovative audio visual aids among children regarding health needs.

- To provide knowledge, the nursing personnel need to be equipped with
- adequate knowledge and conduct mass health education programme on importance of personal hygiene
- The child health nursing curriculum needs to be strengthened and should include more content towards school health programs especially on prevention diseases caused by unhygienic practices which commonly affects the children
- Impart health education measures and component of health education.
- Lifestyle modification needed to prevent or control disease progression and disability status.

NURSING ADMINISTRATION

- The health administration of nursing at the national, state, district, institutional and local level should focus their attention on making the public awareness to improve the high quality water hygiene, environmental sanitation, and personnel hygiene, preventive health services among the children and parents.
- The nurse administrator should arrange the training and appropriate teaching material regarding personal hygiene for school age children.
- Administrator can organise educational programmes in schools, hospitals and community areas to provide knowledge regarding importance of personal hygiene and prevention of diseases.
- The nurse administrator should motivate the mothers and make arrangements for periodic health education to the children

regarding prevention of diseases by following proper hygienic measures.

- The nurse administrator should recommend to the superior for the supply of suitable posters, pictures related to personal hygiene which can be displayed in the health post premises.

6.4 RECOMMENDATIONS

- A similar study can be replicated on a large scale basis.
- A similar study can be conducted on among adolescent school children.
- A similar study can be done for longer duration.
- A similar study can be conducted to the parents and teachers.
- A similar study can be conducted to educated or to spread any other aspect of health like importance of immunaisation ,nutrition etc., to the public

6.5 CONCLUSION

The hygiene of the body is one of the most important factors that must be taken seriously. Hygiene is very essential for children , it is the duty of the care giver to create a lasting relationship between health and hygiene. Teaching personal hygiene to children can be an ongoing challenge and it should be kept reinforced. School Nurses can use the Child to child approach to further their goals of health promotion and education about issues such as nutrition, healthy lifestyles, community development .The approach also addresses issues of learning and links what is learned now with what we do now. It links with what we learn in the classroom with what we do out of class and at home. So educating the children with innovative teaching methods and aids will improve their knowledge. The present study shows that child to child approach is

the best method that make the children to involve, understand , practice and spread the health related news to peers, parents and public . The approach promotes experimental learning and the use of a wide range of teaching strategies. It sees children as equal partners who are able to make a difference in their communities

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7) http://www.helthsquare.com

8) http://www.medhelp.org

9) http://www.medtrip.com

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11) 11.http://www.onelook.com

12) http://www.pudmedcentral.nih.com

13) http://www.jco.com

14) http://www.fda.gov.com

15) http://www.medscap.com

TOOLS FOR DATA COLLECTION:

SECTION – A : DEMOGRAPHIC VARIABLES

Instruction:

The interviewer places a tick mark in the corresponding options according to the response of the subjects

1. Sample number: ☐

2.Sex ☐

a)Male ☐

b)Female

3.Age

a)10-11 years ☐

b) 11-12 years ☐

c)12-13 years ☐

4.Class:

a)6^{th} ☐

b)7^{th} ☐

6.Father's education ☐

a)Illiterate ☐

b)Primary ☐

c)Secondary ☐

d)Graduate and above

7.Mother 's education

a)Illiterate

b)Primary

c)Secondary

d)Graduate and above

8.Family income per month

a)AboveRs. 5000

b)Rs.2500-Rs 4999

c)Rs. 1000 –Rs. 2499

d)Below Rs.100

9.Total number of children in the family

a)One

b)Two

c)Three

d)four

Section-B

Pre and post -test structured questionnaire to assessing the knowledge regarding "Personal hygiene" among school age children

Instruction

Read the following questions carefully and tick the correct most appropriate answer.

I. SKIN CARE

1. Skin care is important because

   a) Healthy skin fights against disease ☐

   b) It covers the entire body ☐

   c) To prevent broken skin ☐

   d) All the above ☐

2. Function of skin is

   a)Maintaining normal body temperature ☐

   b)Synthesis of vitamin D ☐

   c) Protects and covers the underlying organs ☐

   d) All the above ☐

3. Skin care excludes

   a)Excersise ☐

   b)Daily bath ☐

   c)Wearing tight cloth ☐

   d)Washing the body with soap and water ☐

4. Good health skin is

a)Smooth, soft and intact ☐

b)Rough ☐

c)Hard and broken ☐

d)Dry and swollen ☐

5. It is essential to take bath

a)Daily ☐

b)Once in 2 days ☐

c)Twice in a week ☐

d)Thrice in a week ☐

6. Our cloths especially inner wears should be washed

a)Daily. ☐

b)Twice a week ☐

c)Two times per day ☐

d)Once in two days ☐

7. To prevent skin disease it is essential to

a)Use others garments ☐

b)Use neat and clean clothes ☐

c)Use oil food ☐

d)Avoid taking bath. ☐

8. Our cloths should be

a)Washed after each time we wear regularly and dried under sun light ☐

b)Washed after the colour fades ☐

c)Washed and dried inside the house ☐

d)Not be washed regularly ☐

9. The bath towel must be

a)Smooth , soft and clean ☐

b)Rough and dirty ☐

c)Wrinkled and torn ☐

d)Any type ☐

10. Frequent change of soap

a)Is harmful to skin ☐

b) Maintain cleanliness ☐

c)Is good for health ☐

d) Prevent skin infection ☐

II.DENTAL CARE

11. The problem of oral cavity

a)Dental caries ☐

b)Periodontal disease ☐

c)Angular stomatitis ☐

d)All the above. ☐

12. How many times per day the child should clean the teeth

a)One time ☐

b)Two times ☐

c)After each meal ☐

d)Only night ☐

13. What is the main cause for discoloration of the teeth.

a)Improper oral hygiene ☐

b)Use of ash ☐

c)Using different colour of tooth paste ☐

d)Hardness of water ☐

14. Which vitamin is necessary for healthy gums?

a)Vitamin-A ☐

b)Vitamin –B ☐

c)Vitamin-C ☐

d)Vitamin-D ☐

15. Which mineral is necessary for healthy teeth

a)Potassium ☐

b)Calcium ☐

c)Iron ☐

d)Chloride. ☐

III.HAIR CARE

16. Good hair care is important because it

a)Prevent dandruff nits and lies. ☐

b)Enhance hair growth ☐

c)Reduce hair fall and promote comfort ☐

d)All the above. ☐

17. Hair care includes

a) Combing hair periodically ☐

b)Applying oil regularly ☐

c)Taking hair bath regularly. ☐

d)All the above ☐

18. Hair combing is important because it

a)Stimulate blood circulation ☐

b)Gives a good appearance. ☐

c)Keep the hair neat and clean. ☐

d)All the above ☐

19. Which diet stimulate hair growth.

a)Green leafy vegetables ☐

b)Cereals ☐

c)Germinating pulses ☐

d)Meat ☐

20. Oil bath to be taken----------

a)Two times a week ☐

b)Frequently ☐

c)Twice in a month ☐

d)Monthly once ☐

IV.HAND AND FOOT CARE

21. Why should we wash the hands before eating?

a)To prevent infection ☐

b)To have more food ☐

c)To reduce the weight ☐

d)It's our culture ☐

22. When should we cut our nails

a)Twice in a week ☐

b)After the nail grows ☐

c)Daily ☐

d)Once in a week ☐

23. Why should we clean our hands after toileting?

a)To prevent infection ☐

b)To promote good habit ☐

c)To promote good health ☐

d)All of the above ☐

24. Foot care includes

a)Washing the feet atleast twice daily

b)Wearing cotton socks and correct size shoes and slippers

c)Cutting the toe nails regularly

d)All the above

25. Bare foot walking in children especially may results in

a)Warm infection

b)Injuries of feet

c)Promotion of good circulation in feet

d) (a) and (b)

V.EYE AND EAR CARE

26) Why eye care is very essential?

a)To promote good vision

b)To prevent infection

c)To prevent discharges

d)All the above.

27) How to clean the dust from the eyes

a)Rubbing with dirt hands

b)Use any types of drops and instil in the eyes

c)Use clean running water with cotton

d)Use soap and water

28. Which is the vitamin necessary for good vision?

a)Vitamin-A

b)Vitamin-B

c)Vitamin-C

d)Vitamin-D

29. How and when to clean the ears?

a) Clean the outer ear after bath or swimming by a soft clean cloth daily

b)By using soft pins or sticks inside the ear.

c)By using cotton buds twice a day inside the ear

d)By splashing soap and water inside the ear.

30. Why it is necessary to keep our ears clean always ?

a)To prevent infection and discharges.

b)To prevent ear blocking by wax .

c)To prevent respiratory tract infection.

d)All the above.

Scoring:

With respect to the knowledge scale the scoring of section B is as follows,for each correct answer 1 mark is awarded ,for wrong answers no mark is awarded,then the marks are converted to percentage and score was classified as

<50% -Inadequate knowledge

50-75% -Moderately adequate knowledge

>75% -Adequate knowledge

Structured [laptop assisted] teaching plan on personal hygiene

TOPIC	: Personal hygiene for school age children.
GROUP	: school age children under the age group 10 -13 years
PLACE	: Hindu union middle school at choolai in Chennai.
TIME	: Convenient time [9am to 3 pm]
INSTRUCTOR	: Investigator
METHOD OF TEACHING	: Explanation cum discussion
TEACHING AIDS	: Laptop with slides on aspects of personal hygiene.

INTRODUCTION

Life style practice affects any individual comfort safety and wellbeing .Healthy people are capable of meeting their own hygienic needs and health needs. Poor hygiene practices and inadequate sanitary conditions play major roles in the increased burden of communicable diseases within developing countries.. A large fraction of the world's illness and death is attributable to communicable diseases Sixty-two percent and 31% of all deaths in South Asia, respectively, are caused by infectious. Educating children on good hygiene is the best way to avoid the spread of infection and disorders and not just for childhood complaints; teaching the principles of correct hygiene at an early age can help keep individuals healthy in later life, and be taught to future generations. Principles of hygiene should be made part of everyday life and the best way for parents to teach their children about good hygiene is to lead by example.

CENTRAL OBJECTIVE:

The teacher help the students to acquire knowledge about "**Personal hygiene**"; and develop positive attitude and skill regarding personal hygiene and practice in life.

CONTRIBUTORY OBJECTIVE:

At the end of class the students will be able to

- **define the terms hygiene and personal hygiene**
- **list down the importance of personal hygiene**
- **enlist the elements of personal hygiene**
- **explain about skin care**
- **brief the oral hygiene**
- **enunciate regarding care of hair**
- **describe the care of hands and feet**
- **discuss the care of eye, ear and nose**

S.NO	TIME	CONTRIBUTORY OBJECTIVES	CONTENT	STUDENT TEACHER ACTVITY	LEARNER ACTIVITY	A.V AIDS	EVALUATION
1.	**2 min**	**Define the terms hygiene and personal hygiene**	**DEFINITION:** **Hygiene:** Hygiene is the sense of perceiving and promoting health. It is the sense of health and its preservation. Condition or practice conducive to maintaining health and cleanliness. **Personal hygiene:** Personal hygiene are measures a person takes to maintain the and its appendages	**Explaining**	**Listening**	**Laptop slides**	**define personal hygiene**

2.	**2 min**	**List down the importance of personal hygiene**	**Importance of personal hygiene:** ➢ To promote cleanliness ➢ To remove secretions and micro organisms from the body ➢ To prevent infection ➢ To feel comfort and fresh ➢ To improve self image and maintain good appearance. ➢ To improve body circulation and improve peripheral vasodilation. ➢ To enhance the efficiency of body function.	**Explaining**	**Listening**	**Laptop slides**	**Can you list down the importance of personal hygiene?**

3.	**2 min**	**Enlist the elements of personal hygiene.**	**Elements of personal hygiene:** ❖ Care of skin ❖ Care of mouth ❖ Care of hair ❖ Care of hands and feet ❖ Care of eyes,ears and nose ❖ Balanced nutrition ❖ Exercise	**Explaining**	**Listening**	**Laptop slides**	**Can you enlist the elements of personal hygiene**

4.	**3 min**	**Explain about skin care**	**Care of Skin:** Care of skin includes bathing and clothing.Skin plays an important role in our whole body.So skin care is very essential because it • Fight against disease • Prevents broken skin • Prevents infection • Acts as a covering layer to all the internal organs. **Other important function** • It covers the entire body • Maintaining body temperature • Synthesis of vitamin-D • Sensation	**Explaining**	**Listening**	**Laptop slides**	**Explain about skin care.**

			• Prevent from injury • Excretion **Techniques of Skin Care** **a)Massaging and bathing** • Daily bath is very essential to keep the skin clean and prevent infection such as boils,scabies and worm infestation • Bathing should stimulation blood circulation through massage. • Bathing should be taken every day with soap and water.Bath soap should be mild and soft,should not change the bath soap frequently. • Soap change is require when it causes itching dryness and anyallergic reaction on the skin. • In summer the person should take bath atleast two times a day				

			Clothing: ✓ After bath it is very important to wear clean and neat dress. ✓ Under cloths are right next to skin and collect dead skin cells sweat and possible other unmentionable stains ✓ Overnight bacteria start to work on these stains so your cloths do not smell as nice on the second day of wearing. ✓ Neglected skin care like wearing tight cloths using other garments will lead to skin disease.				

5.	**2 min**	**Brief about oral hygiene**	**Care of the Mouth:** Mouth care is very essential care of an individual personal health .Care of mouth includes brushing ,mouth wash and massaging the gums.All should be performed every morning and before going to bed.Because teeth is very essential chewing,mastication of food,good smile and speech. **Common teeth problems** ✓ Dental caries ✓ Periodontal disease ✓ Bad breath ✓ Gum bleeding	**Explaining**	**Listening**	**Laptop slides**	**Brief about oral hygiene**

			Importance of Dental Hygiene **a)Brushing** ➢ Teeth should be cleaned at least twice in a day i.e every morning and at night time. ➢ Tooth brush should be soft and long handled should not be hard or too long ➢ A vertical or circular brushing and standardized tooth paste are recommended ➢ After eating snacks,chocolates or meals and before eating rinse the mouth with plain water ➢ Brushing must be compulsory before going to bed because food particles in between the teeth attached by the bacteria and it will also attack the teeth**.**				

			➢ Clean your tongue too which keeps bad breath away.A heigh percentage of bacteria accumulate in the area the back of the tongue ➢ Every six month we should change our tooth brush ➢ While brushing the person should clean from centre then each side with up and down motion. **Mouth Wash** Mouth wash or mouth rinse is a product used to enhance oral hygiene.				

6.	**3min**	**Enunciate about the care of hair.**	Gargle with mouth wash for 30 seconds Don't swallow the mouth wash spit it out It removes all the food particles in between the teeth. Vitamin C contained in all citrus fruits that prevents gum bleeding Vitamin B complex is very essential for good oral mucosa. **Care of hair:** The condition of hair reflects to some extend the nutritional status and general health status.Good and healthy hair improves the image.Also the sweat glands in our scalp and dead cells of the scalp should be cleaned .Care of hair include washing, oiling, combing and massaging.	**Explaining**	**Listening**	**Laptop slide**	**Can you tell about care of hair?**

			Common hair problems: ❖ Dandruff ❖ Ticks ❖ Pediculosis ❖ Hair lose **Technique of Hair care** **a)Regular washing and oiling** We should wash the regularly with clean water and shampoo at least twice in a week Apply oil every day to prevent drying of hair The oil sweat and dead cells on the scalp gives a greasy appearance to the hair.So hair wash with appropriate shampoo is very necessary				

			b)Combing: • Comb hair daily it will give good appearance and promote circulation on the scalp. • Select a write comb or hair brush • Excessive combing will result in hair damage. **c)Massaging:** Massage the hair while applying oil and shampoo is essential to improve the circulation on the scalp that improve the hair growth**.**				

7.	**2mins**	**Describe about care of hands and feet Discuss about care of eyes,ears and nose**	**Care of hands and feet:** • Washing hands before having food and after defecation that prevents disease caused by faeco-oral rout. • Improper hand washing is the main reason for spread of diseases like diarrhoea,cholera etc., • Wash hands at least 30 seconds before having food with soap or hand wash. • Give equal importance to your legs as your hands. • Wash your feets after you come from outside. • Avoid walking in bare foot as it may pick up fungal infection and can cause worm infestation. • Cut your nails in hands and foot weekly once .	Explaining		**Laptop slides**	**Describe about care of hands and feet.**

			Care of Eyes,Ears and Nose **a)Eyes:** Eyes are very important that it is window through which we see the whole world. Care of eyes is very essential as it is very precious and delicate as your heart and brain. **Common Eye problems**: • Conjunctivitis • Corneal ulcer • Night blindness • Exophthalmia • Cataract • Glaucoma **Care of Eyes:** Clean the eye with plain clean water always,don't use any soap or cleaning solutions that cause irritation to the eyes. If you cought with any dust in the eyes clean it with water and clean cotton cloth,don't use hands to rub the eyes. Should not strain the eyes by reading in dim	Explaining		**Laptop slides**	**Discuss about care of eyes,ears and nose**

			light or more bright light. Food rich in vitamin-A like carrot, green leafy vegetables,papaya etc to be taken for good vision. **Ears:** Your ears can become cloggesd when to much earwax(cerumen)accumulates inside them.While its an important part of your body's natural defense system for keeping dirt bacteria and other things out of your ears,too much earwax can decrease your hearing ability. Don't use any sharp applicators like pins,tooth picks,broom sticks to clen the wax or dirt. The wax will prevent the dirt entering the inner ears as days passes these wax will get dry and falls off. The outer ear can be cleaned with cleancotton cloth. The common ear problems are hard wax impaction, earache, discharge, foreign bodies. The above problem should be treated with physician consultation.				

			Nose: Nose is the important organ that help to channel the atmospheric air into the respiratory tract, helps in sense of smell, protects from dust and dirt from entering. Common problems in nose are foreign body accumulation ,impaction with dirt etc Nose should be cleaned with clean cotton cloth,no use of any other applicators like pin,sticks,pencils as children usually do which is very dangerous as it may lead to accident aspiration of the particles .				

Conclusion:

Thus we have seen about personal hygienic practice,its importance,different ways to follow hygienic practice to care in five different aspects like care of skin,mouth,hair,hands and feet,eyes,nose and ears. Educating children on good hygiene is the best way to avoid the spread of infection and disorders and not just for childhood complaints; teaching the principles of correct hygiene at an early age can help keep individuals healthy in later life, and be taught to future generations.

பாகம் – அ

முறையான நேர்காணல் படிவம்

கீழ்கண்ட வினாக்களுக்கு தகுந்த பதிலை கொடுக்கபட்ட கட்டத்தில் குறியிடுக

1. வரிசை எண்:

3. வயது: அ)10-11

ஆ)11-12

இ)12-13

4. வகுப்பு:

அ) 6 ஆம் வகுப்பு

ஆ) 7 ஆம் வகுப்பு

5. தந்தையின் கல்வி நிலை

அ) 1 முதல் 7 ஆம் வகுப்பு வரை

ஆ) 8 முதல் 12 ஆம் வகுப்பு வரை

இ) தொழிற்க்கல்வி

ஈ) பட்டபடிப்பு

6. தாயின் கல்வி நிலை

அ) 1 முதல் 7 ஆம் வகுப்பு வரை

ஆ) 8 முதல் 12 ஆம் வகுப்பு வரை

இ) தொழிற்க்கல்வி

ஈ) பட்டபடிப்பு

7. குடும்ப மாத வருமானம்

அ) ரூ.2000- ரூ 3000

ஆ) ரூ.3001- ரூ 4000

இ) ரூ.4001- ரூ 5000 ☐

ஈ) ரூ 5000 ற்க்கும் மேல் ☐

பாகம்-ஆ

கீழ்கண்ட வினாக்களுக்கு தகுந்த பதிலை கொடுக்கபட்ட கட்டத்தில்( )குறியிடுக

சரும/தோல் பராமரிப்பு

1. சரும/தோல் பராமரிப்பு முக்கியமானது ஏன்?

அ) வளமான தோல் /சருமம் நோய் தொற்றில் இருந்து நம்மை பாதுகாப்பதால். ☐

ஆ) நம் உடல் முழுவதும் தோலால் மூடப்பட்டிருப்பதால். ☐

இ) சரும/ தோல் அழகான வெளிப்புறத் தோற்றத்தை தருவதால் ☐

ஈ)மேல்கண்ட அனைத்தும் ☐

2. தோலின் வேலைபாடுகள் யாவை ?

அ) உடல் வெப்பநிலையை சீர்படுத்துதல். ☐

ஆ உடலின் உள்உறுப்புகளை பாதுகாப்பதால். ☐

. ☐

இ வைட்டமின்-டி சுரத்தல் ☐

ஈ)மேல்கண்ட அனைத்தும் ☐

3 .பின்வருபவற்றுள் சரும பராமரிப்பில் உள்ளடங்காதாது எது?

அ) முறையான உடற்பயிற்ச்சி. ☐

ஆ சரிவிகித உணவு உட்கொள்ளுதல். ☐

இ) தினமும் குளித்து தூய்மையான ஆடை அணிதல் ☐

ஈ)இருக்கமான ஆடை அணிதல் ☐

4. ஆரோக்கியமான சருமம் எப்படி இருக்கவேண்டும்?

அ) மென்மையாகவும் மிருதுவாகவும்

ஆ) சொறசொறப்பாக.

இ) வரட்சியாக

ஈ) செதில்செதிலாக

5.சரும பாதுகாபிற்காக எவ்வெப்போது குளிப்பது நல்லது?

அ) தினமும் ஒருமுறை அல்லது இரண்டு முறை

ஆ) இரண்டு நாட்களுக்கு ஒரு முறை.

இ) வாரம் இரண்டு முறை.

ஈ) வாரம் ஒரு முறை.

6.கோடை காலத்தில் எத்தனை முரை குளிக்க வேண்டும்

அ) தினமும் இரு முறை

ஆ) இரண்டு நாட்களுக்கு ஒரு முறை.

இ) வாரம் இரண்டு முறை

ஈ) வாரம் ஒரு முறை

7.சரும பாதுகாப்பில் இன்றியமையாதது எது?

அ) தினமும் குளித்து தூய்மையான ஆடை அணிதல்

ஆ) சுத்தமற்ற அல்லது பிறர் ஆடைகளை அணிதல்.

இ) குளிப்பதை தவிர்த்தல்

ஈ) முறையற்ற உணவு பழகம்

8. நாம் நமது ஆடைகளை

அ) ஒவ்வொரு முறை உடுத்திய பின் நன்றாக துவைத்து வெய்யிலில் உலர்த்த வேண்டும்

ஆ) பல முறை உடுத்திய பின் துவைக்கவேண்டும்

இ) நன்றாக துவைத்து வீட்டிற்குள்ளேயே உலர்த்த வேண்டும்

ஈ) துவைப்பது நல்லது அல்ல

9.குளியலுக்கு உபயோகிக்கும் துவளை எப்படி இருக்க வேண்டும்?

அ)மென்மையானதும் மற்றும் சுத்தமானதுமாக

ஆ) கடினமானதாக.

இ) அழுக்காக

ஈ) எப்படி வேண்டுமானாலும் இருக்கலாம்

10.அடிக்கடி குளியல் சோப்பை மாற்றுவது

அ) சரும பாதிப்பை உண்டாகும்

ஆ) மென்மையான சருமத்தை தரும்.

இ) தொல் நோய்களை குறைக்கும்

ஈ) சிறந்த சரும பாதுகாப்பு

<u>தலை முடி/கூந்தல் பராமரிப்பு</u>

11.தலை முடி/கூந்தலை ஏன் பராமரிக்க வேண்டும்?

அ) பொடுகை நீக்க

ஆ) உடலின் வெப்பத்தை குறைக்க

இ) நன்றாக தலை முடி வளர

ஈ) மேல்கண்ட அனைத்தும்

12. தலை முடி/கூந்தல் பராமரிப்பு என்பது

அ) தினமும் தலை வாருதல்

ஆ) வாரம் இரு முறையாவது தலை குளித்தல்

இ) தினமும் தலைக்கு எண்ணை தேய்த்தல்

ஈ) மேல்கண்ட அனைத்தும்

13.சீப்பை கொண்டு தலை வாருதலின் பயன் யாது?

அ) இரத்த ஓட்டத்தை மேன்படுத்தும் அழாகான தோற்றத்தை தரும்

ஆ) முடி உதிர்வதை தூண்டும்

இ) அழாகான தொற்றத்தை தரும்

ஈ) அ மற்றும் ஆ

14.எந்த உணவு பொருள் முடி நன்கு வளர உதவும்?

அ) பச்சை காய்கறிகள்

ஆ) பயிறு வகைகள்

இ) முட்டை மற்றும் மாமிச வகைகள்

ஈ) மேல் கண்ட அனைத்தும்

15.எத்தனை முறை தலையில் எண்ணெய் தேய்த்து குளிக்க வேண்டும்?

அ) தினமும் இரு முறை

ஆ) இரண்டு நாட்களுக்கு ஒரு முறை.

இ) வாரம் இரண்டு முறை

ஈ) வாரம் ஒரு முறை

<u>பற்கள் பறாமறிப்பு</u>

16.முறையாக பற்களை பராமரிக்காமல் இருப்பதால் வரும் தொல்லைகள்

அ) பூச்சிப் பல் அல்லது சொத்தை பல்

ஆ) வாய் துற்நாற்றம் ஏற்படுதல்.

இ) ஈறுகளில் பிரட்சனை

ஈ) அனைத்தும்

17.குழந்தைகள் எத்தனை முறை பல் துலக்க வேண்டும்?

அ) தினமும் காலை மற்றும் இரவு

ஆ) இரண்டு நாட்களுக்கு ஒரு முறை.

இ) தினமும் ஒரு முறை மட்டும்

ஈ) வாரம் ஒரு முறை

18. பற்களின் நிறமாற்றத்திற்க்கு முக்கிய காரணம் என்ன?

அ) முறையில்லா பற்கள் பராமரிப்பு

ஆ) பல் துலக்க சாம்பல் உபயொகித்தல்.

இ) கடினமான நீர் உபயோகித்தல்

ஈ) அனைத்தும்

19. ஆரோக்கியமான ஈறுகளுக்கு தேவையான வைடமின் எது?

அ) வைட்டமின்-ஏ

ஆ) வைட்டமின்-பி

இ) வைட்டமின்-சி

ஈ) வைட்டமின்-டி

20. ஆரோக்கியமான ஈறுகளுக்கு தேவையான தாது உப்பு எது?

அ) பொட்டாசியம்

ஆ) கால்சியம்

இ) இரும்பு

ஈ) குளோரின்

21.உணவு உண்பதற்க்கு முன்பும் பின்னும் ஏன் கைளை கழுவ வேண்டும்

அ) நோய் தொற்று வராமல் தடுக்க

ஆ) அதிக உணவு உண்பதற்க்கு

இ) உடல் எடையை குறைக்க

ஈ) உணவின் சுவையை அதிகரிக்க

22.எப்பொழுது நகங்கள் வெட்ட வேண்டும்

அ) வாரம் ஒரு முறை

ஆ) ஒவ்வொரு முறையும் நகம் வளர்ந்த பின்

இ) தினமும்

ஈ) வாரம் மூன்று முறை

23.ஏன் மலம் கழித்தபின் கைகளை கழுவ வேண்டும்?

அ) நோய் தொற்று வராமல் தடுக்க

ஆ) நல்ல பழக்கம் உண்டாக

இ) உடல் ஆரோக்கியத்தை மேன்படுத்த

ஈ) அனைத்தும்

24.கால் பராமரிப்பு என்பது

அ) தினமும் இரு முறை கால்கலை நன்றாக கழுவுதல்

ஆ) சரியான அளவில் காட்டன் சாக்ஸ் அணிதல்

இ) கால் நகங்களை முறைகளை வெட்டுதல்

ஈ) அனைத்தும்

25.காலணி இல்லாம்ல் குழந்தைகள் நடப்பதினால்

அ) குடற்புழு தொற்று ஏற்படும்

ஆ) கால்களில் அடி படும்

இ) கால்களில் இரத்த ஒட்டதை அதிகரிக்கும்

ஈ) அ மற்றும் ஆ

<u>கண் மற்றும் காது பராமரிப்பு</u>

26.ஏன் கண் பராமரிப்பு மிக முக்கியமானது?

அ) கண் பார்வையை மேம்படுத்த

ஆ) கண்களை நோய் தோற்றில் இருந்து பாதுகாக்க

இ) கண்களின் அழுக்கு கசிவுகளை நீக்க

ஈ) அனைத்தும்

27.கண்களில் தூசி விழுந்தால் எவ்வாறு துடைக்க வேண்டும்?

அ) கைகளால் கண்களை தேய்த்தல்.

ஆ) ஏதேனும் கண் மருந்தை கண்களில் ஊற்ற வேண்டும்

இ) சுத்தமான நீரினால் கண்களை சுத்தம் செய்தல்

ஈ) சோப்பு நீரினால் கண்களை சுத்தம் செய்தல்

28. நல்ல கண் பார்வைக்கு உகந்த வைடமின் எது?

அ) வைட்டமின்-ஏ

ஆ) வைட்டமின்-பி

இ) வைட்டமின்-சி

ஈ) வைட்டமின்-டி

29.காதுகளை எவ்வெப்போது மற்றும் எப்படி சுத்தம் செய்ய வேண்டும்?

அ) தினமும் குளித்த பின் மற்றும் நீச்சலுக்கு பின் காதுகளின் வெளிப்புற்த்தை மிருதுவான துணியை கொண்டு சுத்தம் செய்ய வேண்டும்

ஆ) குச்சி அல்லது ஊசி கொண்டு காதினுள் சுத்தம் செய்ய வேண்டும்

இ) காது குடையும் பஞ்சு கொண்டு காதுகளின் உட்பகுதியை சுத்தம் செய்ய வேண்டும்

ஈ) சோப்பு நீர் கொண்டு காதுகளினுள் அடித்து சுத்தம் செய்ய வேண்டும்

30.ஏன் நமது காதுகளை நாம் சுத்தமாக வைத்து கொள்ள வேண்டும்?

அ) கிருமிகளால் காதில் வரும் நோய்களை தடுக்க

ஆ) காதில் சேரும் அழுக்கை அகற்ற

இ) காது வழியாக முச்சுகுழாய்க்கு பரவும் தொற்று நொய்களை தடுக்க

ஈ) மேல்கண்ட அனைத்திற்காகவும்

திட்டமிட்ட கற்பிக்கும் முறை

தலைப்பு: சுய சுத்தம்

குழு: 6 மற்றும் 7ஆம் வகுப்பு பயிலும் மாணவ மாணவியர்கள்

இடம்: வகுப்பறை

நேரம்: 40 நிமிடம்

கற்பிக்கும் மொழி:தமிழ்

கற்பிக்கும் முறை: விளக்கவுரை மற்றும் கலந்துரையாடல்

கற்பித்தல் கருவிகள்: மடி கணினி

பொது குறிக்கோள்:

பள்ளி பயிலும் (11 -13) வயதிற்க்கு உற்ப்பட்ட)மாணவ மாணவியற்களுக்கு சுய சுத்தம் பராமரிப்பு பற்றிய அறிவு திறனைய பெருக்குதல்.

குறிப்பிடத்தக்க குறிக்கோள்கள்:

இந்த கற்றலின் மூலம் மாணவ மாணவியர்கள் அறியவேண்டியவை

- சுய சுத்தம் என்பதை வரையருத்தல்
- சுய சுத்தத்தின் முக்கியத்துவத்தை வரிசைப்படுத்துதல்
- சுய சுத்தத்தின் பாகங்களை பட்டியல் இடுதல்
- சரும பராமரிப்பு பற்றி விவரித்தல்
- வாய் மற்றும் பல் சுத்தத்தை பற்றி எடுத்துரைத்தல்
- தலைமுடி பராமரிப்பு பற்றி அறிவுருதல்
- கைகள் மற்றும் கால்கள் பராமரிப்பு பற்றி கற்றுத்தருதல்
- கண்,காது மற்றும் மூக்கு பராமரிப்பு பற்றி விளக்குதல்.

முன்னுரை:

அனைவருக்கும் வணக்கம்,நான் சென்னை மருத்துவமனையில் உள்ள செவிலியர் கல்லுரியில் இரண்டாம் ஆண்டு முதுகலை செவிலியபட்ட மேற்படிப்பு படித்துக் கொண்டிருக்கிறேன்.தமிழ்நாடு டாக்டர் எம்.ஜி.ஆர் மருதுவப் பல்கலைக் கழக விதிமுறைப் படி தங்களிடம் பள்ளி மாணவ மாணவிர்களுக்கு சுய சுத்தத்தின் முக்கியத்துவத்தை பற்றி விரிவாக எடுத்து கூற உள்ளேன்.சுய சுத்தம் என்பது நம் நல் வாழ்விற்கு இன்றியமையாத ஒன்றாகும்.

“கூழானாலும் குளித்து குடி

கந்தையானாலும் கசக்கிக் கட்டு

-என்ற கூற்றிற்கேற்ப நாம் நம் சுய சுத்தத்தை பேணி காத்தால் நோய் இல்லாத வாழ்வை வாழ முடியும்.

வ.எண்	நேரம்	குறிக்கோள்	பாடப்பொருள்	கற்பித்தல் செயல்கள்	கற்றல் செயல்கள்	மதிப்பீடு செய்தல்
1.	2 நிமிடம்	சுய சுத்தம் என்பதை வரையருத்தல்.	<u>சுத்தம்:</u> தூய்மையான வழிகளை பின்பற்றி உடல்நிலையை பாதுகாப்பாகவும் ஆரோக்யமாகவும் வைத்துகொள்ளும் முறை. ஆரோக்கியத்தையும் சுத்ததையும் தொடர்ந்து தக்க வைத்துக் கொள்ளுவது உடல் நலம் பேணும் நிலை ஆகும். சுத்தம் என்பது சமூகத்திற்க்கு ஒத்த ஆரோக்கியத்தை மேம்படுத்தி. பாதுகாப்பான உடல்நலத்தை பெற்று வாழ்வது. <u>சுய சுத்தம்</u>: சுய சுத்தம் என்பது மனிதனின் அடிப்படை சுகாதாரமான நிலையும் ஆரோக்கியமான உடல் பாதுகாப்பையும் குறிக்கும். உடலின் புறசுத்தத்தை	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	சுய சுதம் என்றால் என்ன?

2.	2 நிமிடம்	சுய சுத்தத்தின் முக்கியத்துவத்தை வரிசைப்படுத்துதல்	பாதுகாப்பதன் மூலம் நோய் எதிர்ப்பு சக்தியை மேம்படுத்தி நம் உடல்நிலையை ஆரோக்யமாக வைத்துக்கொள்ளும் நிலை ஏற்படும். <u>சுய சுத்தத்தின் முக்கியதுவம்:</u> • தூய்மையான புறத்தோற்றத்தை பெற • நோய் ஏற்பத்தும் கிருமிகளையும் நுண்ணுயிர்களை அகற்ற • பொலிவான சருமத்தை பெற • இரத்த ஒட்டத்தை அதிகரிக்க. • தொற்று நோய்களை தவிர்க்க. • சுய மரியாதையை மேன்படுத்த. • நோய் எத்திர்ப்பு சக்தியை அதிகரிக்க	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	சுய சுத்தத்தின் முக்கியத்துவத்தை வரிசைப்படுத்த வைத்தல்.

3.	2 நிமிடம்	சுய சுத்தத்தின் பாகங்களை பட்டியல் இடுதல்	• பாதுகாப்பான உடல்நிலையை பெற. <u>சுய சுத்தத்தின் பாகங்கள்:</u> • சரும பாதுகாப்பு • வாய் மற்றும் பற்களின் பாதுகாப்பு • தலைமுடி பராமரிப்பு • கைகள் மற்றும் கால்களின் பராமரிப்பு • கண், காது மற்றும் மூக்கு பராமரிப்பு • சரிவிகித உண்வு • உடற்பயிற்சி.	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	சுய சுத்தத்தின் பாகங்களை பட்டியல் இட செய்தல்.

4.	4 நிமிடம்	சரும பராமரிப்பு பற்றி விவரித்தல்.	<u>சரும பாதுகாப்பு:</u> • சருமம் என்பது நம் உடல் முழுவதும் போற்றி பாதுகாக்கும் தோலினை குறிக்கும். • நம் உடலில் உள்ள மிகப்பெரிய உறுப்பு தோல் ஆகும். • சரும பாதுகாப்பு_என்பது அன்றாடம் குளித்து தூய்மையான ஆடைகளை அணிதல் ஆகும். தோல்/ சருமத்தின் முக்கிய செயல்கள்: • உடல் முழுவதும் மூடி பாதுகாத்தல் • உடலின் வெப்ப நிலையை சீராக வைத்தல்	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	சரும பராமரிப்பு பற்றி விவரித்தல்.

			• தொற்று நோய்களை தவிர்க்க. • வைட்டமின்-டி சுரக்க • வியர்வையை வெளியேற்ற • அழகான வெளித்தோற்றத்தை பெற. <u>சருமப் பாதுகாப்பு முறைகள்:</u> • சருமப் பாதுகாப்பு_என்பது அன்றடம் குளித்து தூய்மையான ஆடைகளை அணிதல் ஆகும். • தினமும் குளிப்பதின் மூலம் நம் சருத்தில் உள்ள கிருமிகளை அகற்றலாம். • நாம் குளிக்க பயன்படுத்தும் சோப்பு நம் சருமத்திர்க்கு ஏற்றதாக இருக்க வேண்டும். • அடிக்கடி சோப்பை மாற்றினால் சருமப் பாதிப்பு			

			ஏற்படும் • கோடை காலங்களில் குறைந்தது இரண்டு முறையாவது குளிக்க வேண்டும். • நாம் குளிக்க பயன்படுத்தும் துவலை மிருதுவாகவும் தூய்மையானதாகவும் இருக்க வேண்டும். • நாம் எப்பொழுதும் குளித்த உடன் தூய்மையான ஆடைகளை அணிவதே நல்லது. • நாம் அணியும் ஆடைகள் இறுக்கமானதாக இருக்க கூடாது. • நாம் அணிந்த ஆடைகளை தினமும் நன்றாக துவைத்து சூரிய ஒளியால உலரவைக்க வேண்டும்.			

5.	2 நிமிடம்	வாய் மற்றும் பல் சுத்தத்தை பற்றி எடுத்துரைத்தல்	<u>வாய் மற்றும் பற்களின் பாதுகாப்பு:</u> • நாம் உணவு உட்கொள்ள உதவும் வாய் மற்றும் பற்களை பாதுத்தல் இன்றியமையாததாகும். • பற்சொத்தை, வாய் துற்நாற்றம்,ஈறுகளின் தொந்தரவு ஆகியவை வாய் மற்றும் பற்களின் பாதுகாக்க தவறினால் ஏற்படும் பிரச்சனைகள். • இதனை தவிற்க்க: • ஒரு நாளைக்கு இரண்டு முறை அதாவது காலை மற்றும் இரவு பற்களை துலக்க வேண்டும். • நாம் உபயோகிக்கும் பல்துலக்கி சுத்தமானதும் மிருதுவாகவும்,நம் வாயின் அளவிற்க்கு ஏற்றதாகவும் இருக்க	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	வாய் மற்றும் பல் சுத்தத்தை பற்றி எடுத்துரைக்க

			வேண்டும். • ஒவ்வொரு முறையும் உணவு உட்கொண்ட பிறகு வாயை கொப்பளித்தல் மிக அவசியம்.இதன் மூலம் வாய் மற்றும் பற்களின் இடையில் உள்ள உண்வு துகள்களை அகற்றலாம். • நம் நாக்கு மேற்பகுதியிலும்,கீழ்பகுதி யிலும் அதிகமான பாக்டீரியா போன்ற நூண்ணுயிர்கள் தங்கி இருக்கும்.எனவே நாக்கை நன்கு சுத்தம் செய்ய வேண்டும். • 30 நொடிகள் வாயை அலச வேண்டும். • ஒவ்வோரு 6 மாதத்திற்கும் ஒரு முறை பல் மருத்துவரிடம் சென்று பரிசோதனை செய்ய வேண்டும்.			

6.	3 நிமிடம்	தலைமுடி பராமரிப்பு பற்றி அறிவுருத்தல்	• வைட்டமின்-சி அடங்கிய பழங்கள் உணவில் சேற்த்துக்கொள்ள வேண்டும். தலை முடி பாதுகாப்பு: • தலை முடி பராமரிப்பு மிக இன்றியமையாதது • நாம் தலை சீவ உபயோகிக்கும் சீப்பு சுதமாக இருக்க வேண்டும். • தினமும் நாம் நம் தலைக்கு எண்ணை தேய்த்து தலை வார வேண்டும். • நம் தலையில் உள்ள வியர்வை,எண்ணை மற்றும் அழுக்கு எல்லாம் சேர்ந்து தலை முடிக்கு பிசுபிசுப்பை தரும். • வாரம் இரு முறையாவது தலை முடியை சுத்தம்	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	தலைமுடி பராமரிப்பு பற்றி அறிவுத்துக

			செய்ய வேண்டும். • தலைக்கு எண்ணை தேய்த்து குளித்தால் உடலில் உள்ள வெப்பத்தை சீர்ப் படுதலாம்.ஆகவே வாரம் ஒரு முறையாவது தலைக்கு எண்ணை தேய்த்து குளிக்க வேண்டும்.			

7.	2 நிமிடம்	கைகள் மற்றும் கால்கள் பராமரிப்பு பற்றி கற்றுத்தருதல்	கைகள் மற்றும் கால்கள் பராமரிப்பு: • நாம் உணவு உட்கொள்ளும் முன்பும் மலம் கழித்த பின்பும் கைகளை சுத்தமாக 30 நொடிகள் சொப்பு போட்டு நங்கு கழுவ வேண்டும். • கைகளை ஒழுங்காகக் கழுவாவிட்டால் வயிற்றுப் போக்கு,வாந்தி,காலரா போன்ற நோய்கள் ஏற்படும். • நம் விரல் நகங்களை வாரம் ஒரு முறை வெட்டி அழுக்கை அகற்றி சுத்தமாக வைத்துக் கொள்ள வேண்டும். • வீட்டை விட்டு வெளியே செல்லும் போது எப்பொழுதும் காலணிகள் அணிய வேண்டும். • இல்லாவிட்டால்	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	கைகள் மற்றும் கால்கள் பராமரிப்பு பற்றி கூறுக?

8.	2 நிமிடம்	கண்,காது மற்றும் மூக்கு பராமரிப்பு பற்றி விளக்குதல்.	வயிற்றுப் பூச்சி வருவதற்க்கான வாய்ப்புகள் அதிகம். • கால்களையும் நன்கு சுத்தமாக வைத்துக்கொள்ள வேண்டும், • காலணிகள் மற்றும் காலுரைகளையும் நன்கு துவைத்து வெயிலில் உலர வைக்க வேண்டும், கண்,காது மற்றும் மூக்கு பராமரிப்பு: கண் பராமரிப்பு: உலகை காண உத்வும் கண்களை பராமரிப்பது மிக அவசியம். கண்களில் ஏதேனும் தூசு விழுந்தால் சுத்தமான குளிர்ந்த நீரால் கழுவ வேண்டும். கண்களின் வெளிப்புறத்தை சுத்தமான மற்றும் மிருதுவான	விளக்கவுரை மற்றும் கலந்துரையாடல்	கவனித்தல் மற்றும் கலந்துரையாடல்	கண்,காது மற்றும் மூக்கு பராமரிப்பு பற்றி விளக்குக.

			துனியால் துடைக்க வேண்டும். நாம் நம் கண்களை எப்பொழுதும் கைகளால் தேய்க்கக்கூடாது. வைட்டமின்-ஏ நிறைந்த உணவுகளை(பச்சை காய்கறிகள்,கேரட்,பப்பாளி போன்றவை)சேர்த்துக்கொள்ள வேண்டும். காது பராமரிப்பு: • நம் காதுகளை குச்சி,ஊசி போன்றவற்றை உபயோகித்து சுத்தம் செய்யக்கூடாது.அவ்வாறு செய்தால் செவித்திரை கிழிந்து கேட்கும் திறனை இழக்க நேரிடும். • நம் காதுகளில் உற்ப்பத்தியாகும் செருமன் நாளடைவில் தானாக காய்ந்து உதிர்ந்துவிடும்.			

			• சில சமயம் அது நம் காதுகளை அடைத்துக்கொண்டால் மருத்துவமனை சென்று தான் அகற்ற வேண்டும். • காதுகளின் வெளிபுறத்தை சுத்தமான மென்மையான துணியை வைத்து துடைக்க வேண்டும். மூக்கின் பராமரிப்பு: • நம் சுவாசிக்கும் காற்ல் உள்ள தூசிகளை மூகில் உள்ள சிறிய முடிகள் வடிகட்டும். • நம் மூக்கில் குச்சி.எழுதுகோல் போன்ற்வற்றை விடக்கூடாது.			

முடிவுரை:

இதுவரை நாம் சுயசுத்தத்தை பற்றியும்,அதன் முக்கிய பாகங்களான சரும சுத்தம்,வாய் மற்றும் பற்கள் சுத்தம்,தலை முடி பராமரிப்பு,கை கால் பராமரிப்பு,கண்,காது,மூக்கு பராமரிப்பு பற்றி பார்த்தோம்.அதை நல்ல முறையில் கடைபிடித்து நலமாய் வாழ் வாழ்த்துக்கள். .

CERTIFICATE OF CONTENT VALIDITY

This is to certify that a tool prepared by Ms.S.Saranya, M.Sc. Nursing, II year of College of Nursing, Madras Medical College, undertaking a research study on "**A comparative study to assess the effectiveness of child to child approach versus laptop assisted teaching regarding personal hygiene among school age children in Hindu Union Middle School,Choolai,Chennai"**, has been validated by me and is found to be valid and up to date and she can proceed with this tool to conduct the main study.

Signature : 

Name : ZEALOUS MARY.C

Designation : READER

Date : 16.08.13

Place :

Seal : 

CERTIFICATE OF CONTENT VALIDITY

This is to certify that a tool prepared by Ms.S.Saranya, M.Sc. Nursing, II year of College of Nursing, Madras Medical College, undertaking a research study on "**A comparative study to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in Corporation School at Choolai in Chennai**", has been validated by me and is found to be valid and up to date and she can proceed with this tool to conduct the main study.

Signature :

Name : Dr. T. RAVICHANDRAN

Designation : PROFESSOR IN PEDIATRIC MEDICINE

Date : 30/8/2013

Place : INSTITUTE OF CHILD HEALTH

Seal :

Senior Civil Surgeon
Institute of Child Health and
Hospital for Children
Egmore, Chennai-600 008

Dr.P.KUGANANTHAM.
M.B.B.S., D.P.H., M.P.H.,
WHO Fellow (Johns Hopkins, USA)
D.T.M&H (LSTM& H-UK), F.I.S.C.D.
CITY HEALTH OFFICER
Public Health Department
Corporation of Chennai

Off; 044 – 2538 3611
Res; 044 – 2550 5060
Mobile; 94451 90744
Fax; 044 -2538 3611
E-mail.drkugan@yahoo.com
/ho@chennaicorporation.gov.in

HDC.No.C1/5150/2013 Date: 08.08.2013

Sir/Madam,

Sub: Corporation of Chennai – Public Health Department – Field study – Requisition for permission for the terms of research study at choolai Community area of Chennai assessing their health status – reg.

Ref: 1.Letter from the principal, Madras Medical College, Chennai Dated: 16.07.2013.

2. Orders of the Deputy Commissioner (Health), Dated: 29.07.2013

****

As per the orders of the Deputy Commissioner (Health) in the reference second cited, 11 M.sc (Nursing) student of the Madras Medical College, Chennai is permitted to research study at choolai community area of Chennai and assessing their health status with the usual conditions as detailed below.

1. Corporations name in all publications and Corporation Health officials as Co-Author.
2. Reports should be well informed to official of Health Department.
3. No negative reporting about corporation to be made.

CITY HEALTH OFFICER

To
Mrs.S.Saranya,
Msc.,(Nursing) II Year,
College of Nursing,
Madras Medical College,
Chennai – 600 003.

Ref lr no 238/ Cont / MMC / dte. 3 dated 10.7.13

From

M.s.S.SARANYA,
M.Sc(Nursing) II year,
College of Nursing,
Madras Medical College,
Chennai-3.

To

Assistant Elementary Educational Officer
Periyamedu range
Davidson street
Chennai.1

Through Proper Channel,

Respected Madam,

Sub: Requesting Permission to conduct a research study-reg

I,M.s S.Saranya, studying M.Sc.Nursing II year , kindly request you to grant me permission for the study proposed to conduct on the topic**"A comparative study to assess the effectiveness of child to child approach versus laptop assisted teaching regarding personal hygiene among school age children in Hindu union middle school ,choolai, Chennai.**to fulfill the requirement of data collection . I assure you that it will not interfere with routine activities of the school.

Forwarded
10/07/13

Thanking you,

Date: 10.07.13

Yours Obediently

Place: Chennai-3.

15/7/13

S.SARANYA

Asst. Ele. Educational Officer
Periamet Range, Chennai-1

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI -3

EC RegNo.ECR/270/Inst./TN/2013
Telephone No : 044 25305301
Fax : 044 25363970

CERTIFICATE OF APPROVAL

To
S.Saranya ,
M.Sc.,(N) II year,
College of Nursing,
Madras Medical College, Chennai-3.

Dear S.Saranya

The Institutional Ethics committee of Madras Medical College, reviewed and discussed your application for approval of the proposal entitled "A comparative study to assess the effectiveness of child to child approach versus laptop assisted teaching regarding personal hygiene among school age (8-9 years) children in selected government primary school, Chennai" No.15072013.

The following members of Ethics Committee were present in the meeting held on 06.07.2013 conducted at Madras Medical College, Chennai -3.

1. Dr.G.SivaKumar, MS FICS FAIS --- Chairperson
2. Prof. R. Nandhini MD -- Member Secretary
   Director, Instt. of Pharmacology ,MMC, Ch-3
3. Prof. Shyamraj MD -- Member
   Director i/c , Instt. of Biochemistry , MMC, Ch-3
4. Prof. P. Karkuzhali. MD -- Member
   Prof., Instt. of Pathology, MMC, Ch-3
5. Prof. Kalai Selvi -- Member
   Prof of Pharmacology, MMC, Ch-3
6. Prof. Siva Subramanian, -- Member
   Director, Instt. of Internal Medicine, MMC, Ch-3
7. Thiru. S. Govindsamy. BABL -- Lawyer
8. Tmt. Arnold Saulina MA MSW -- Social Scientist

We approve the proposal to be conducted in its presented form.

Sd/ Chairman & Other Members

The Institutional Ethics Committee expects to be informed about the progress of the study, and SAE occurring in the course of the study, any changes in the protocol and patients information / informed consent and asks to be provided a copy of the final report.

R Nandini
Member Secretary, Ethics Committee

சுய ஒப்புதல் படிவம்

ஆய்வு செய்யப்படும் தலைப்பு

சென்னை அரசு நடுநிலைப்பள்ளி மாணவர்களுக்கு சுய சுத்தம் பற்றி மடிக்கணினி மற்றும் குழந்தை-குழந்தை அனுகுமுறை மூலமாக கற்றுக்கொடுத்து இவற்றுள் எது சிறந்தது என்று கண்டறியும் ஆராய்ச்சி

பங்குபெறுபவரின் பெயர்: **வயது:** **தேதி:** **உள் நோயாளி எண்:**

..... என்பவராகிய நான் இந்த ஆய்வின் விவரங்களும் அதன் நோக்கங்களும் முறையாக அறிந்துகொண்டேன். எனது சந்தேகங்கள் அனைத்திற்கும் தகுந்த விளக்கம் அளிக்கப்பட்டது. இந்த ஆய்வில் முழு சுதந்திரத்துடன் மற்றும் சுய நினைவுடன் பங்கு கொள்ள சம்மதிக்கிறேன்.

எனக்கு விளக்கப்பட்ட விஷயங்களைப் புரிந்துகொண்டு நான் எனது சம்மதத்தை தெரிவிக்கிறேன். இச்சுய ஒப்புதல் படிவத்தை பற்றி எனக்கு விளக்கப்பட்டது.

இந்த ஆய்வினை பற்றிய அனைத்து தகவல்களும் எனக்கு தெரிவிக்கப்பட்டது. இந்த ஆய்வில் எனது உரிமை மற்றும் பங்கினை பற்றி அறிந்துகொண்டேன்.

இந்த ஆய்வில் பிறரின் நிர்பந்தமின்றி என் சொந்த விருப்பத்தின்பேரில் தான் பங்கு பெறுகிறேன் மற்றும் நான் இந்த ஆராய்ச்சியிலிருந்து எந்நேரமும் பின்வாங்களாம் என்பதையும் அதனால் எந்த பாதிப்பும் ஏற்படாது என்பதையும் நான் புரிந்துகொண்டேன்.

இந்த ஆய்வில் கலந்துகொள்வதன் மூலம் என்னிடம் பெறப்படும் தகவலை ஆய்வாளர் இன்ஸ்ட்டியூசனல் எத்திக்ஸ் கமிட்டியிடமோ, அரசு நிறுவனத்திடமோ தேவைப்பட்டால் பகிர்ந்து கொள்ளலாம் என சம்மதிக்கிறேன்.

இந்த ஆய்வின் முடிவுகளை வெளியிடும்போது எனது பெயரோ, அடையாளோ வெளியிடப்படாது என அறிந்துகொண்டேன். இந்த ஆய்வின் விவரங்களைக் கொண்ட தகவல்தாளைப் பெற்றுக்கொண்டேன்.

இந்த ஆய்வில் பங்கேற்கும்பொழுது ஏதேனும் சந்தேகம் ஏற்பட்டால், உடனே ஆய்வாளரை தொடர்புகொள்ள வேண்டும் என அறிந்துகொண்டேன்.

இச்சுய ஒப்புதல் படிவத்தில் கையெழுத்திடுவதன் மூலம் இதிலுள்ள அனைத்து விஷயங்களும் எனக்கு தெளிவாக விளக்கப்பட்டது என்று தெரிவிக்கிறேன். இச்சுய ஒப்புதல் படிவத்தின் ஒரு நகல் எனக்கு கொடுக்கப்படும் என்று தெரிந்துகொண்டேன்.

ஆராய்ச்சியாளர் கையொப்பம்

தேதி:

பங்கேற்பாளர் /பாதுகாவலர்/
பெற்றோர் கையொப்பம்/
தேதி:

CERTIFICATE OF ENGLISH EDITING

This is to certify that the study conducted by Ms. S. Saranya , II year M.Sc. Nursing , College of nursing, Madras Medical College, on the topic **"A comparative study to assess the effectiveness of laptop assisted teaching versus child to child approach regarding personal hygiene among school age children in selected Corporation School at Choolai in Chennai"** has been edited by me for English language appropriateness.

Signature: V. Kamatchi

Name: V. KAMATCHI

Designation: LECTURER

Place: CUDDALORE - 607003

Seal: Sri Saraswathi Vidhyaalaya
Matriculation Hr. Sec. School
MALUMIYARPETTAI
CUDDALORE PORT- 607 003.